

Finding Evidence on the Web Through HEAL-WA: Only a Click Away

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Objectives

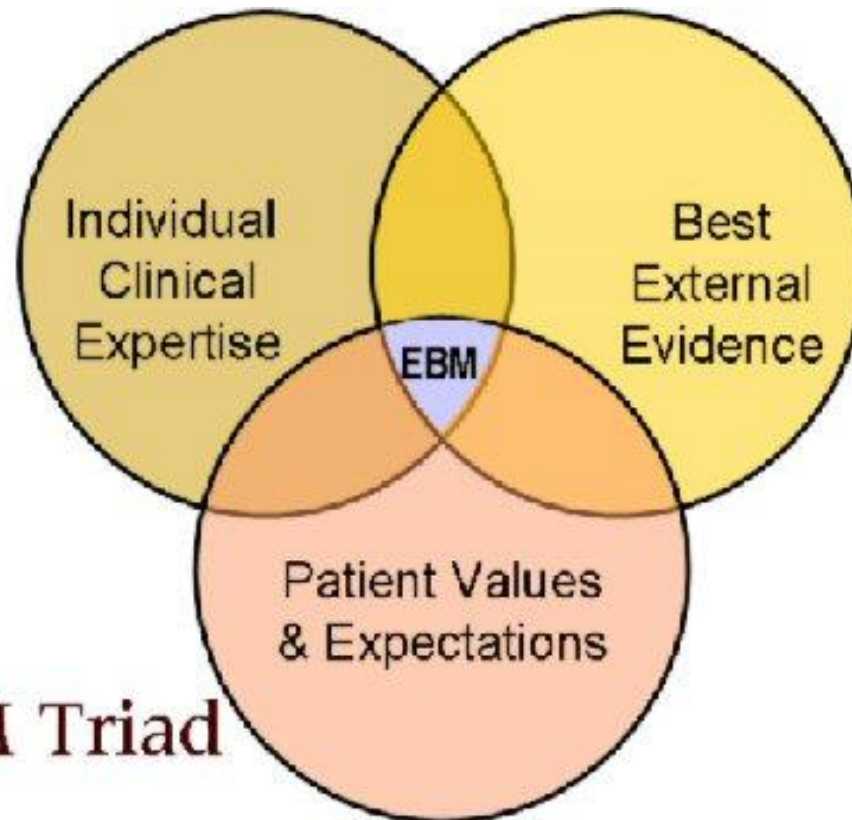
- Describe how to access **HEAL-WA**, the evidence-based website for Washington State nurses
- Define **evidence-based practice** and what makes good evidence
- Identify e-resources on **HEAL-WA** to use for research and evidence-based nursing practice

What is evidence-based medicine?

- Evidence-based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients.
- The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research.

Sackett DL et al. *Evidence based medicine: what it is and what it isn't.* BMJ 1996 Jan 13; 312 (7023): 71-2.

Evidence-Based Medicine



The EBM Triad

What makes good evidence?

Good

- Based on scientific research
- RCT
- Systematic review
- Meta-analysis
- Clinical guidelines

Shoddy

- Expert opinion
- Consensus
- Because it's been done this way for 100 years

EBP Implications for Nursing

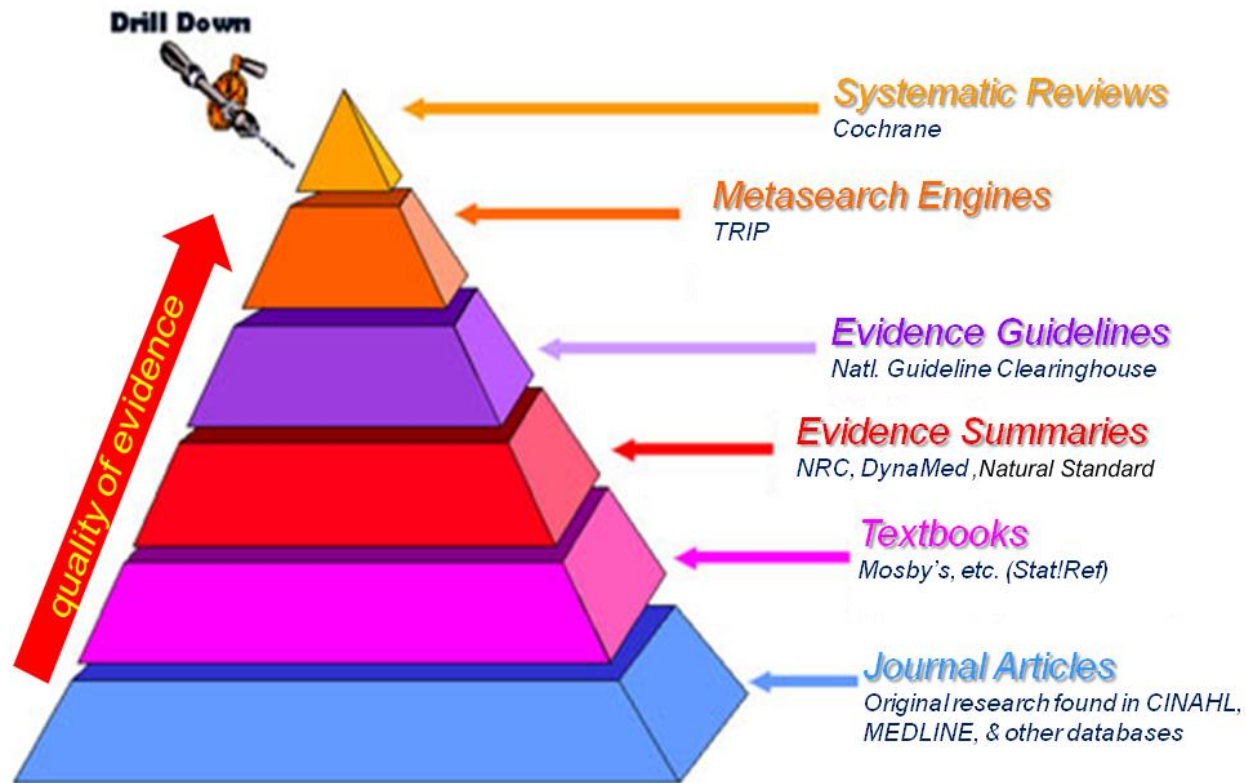
- **Are U.S. nurses ready for evidence-based practice?**
 - Many don't understand or value research
 - Many have little of no training to help find evidence on which to base their practice
 - Pravikoff DS, Tanner AB, Pierce ST. Readiness of U.S. nurses for evidence-based practice. *American Journal of Nursing* 2005 Sep;105(9):40-52.
- **Failure to use evidence results in lower quality, less effective and more expensive care.**
 - Berwick DM. Disseminating innovations in health care. *JAMA* 2003 Apr 16;289(15):1969-75.

Levels and Grades of Evidence

Levels of Evidence and Grades of Recommendations

Grade of recommendation	Level of evidence	Interventions
A	1a	Systematic review of randomized controlled trials
	1b	Individual randomized controlled trial
B	2a	Systematic review of cohort studies
	2b	Individual cohort study
	3a	Systematic review of case-control studies
	3b	Individual case-control study
C	4	Case series
D	5	Expert opinion without explicit critical appraisal or based on physiology or bench research

Searching for Evidence Categories



**Where can you find evidence only
one click away?**



- Began January **2009**
- Website offering online access to a collection of health information resources
- Who has access? selected health care providers in Washington **YES, NURSES !**
- Funded by: license fees
- Its mission: to provide evidence-based information to support patient care

What is included in HEAL-WA?

- Resources: electronic databases, online texts, and e-journals
- Includes information resources specific to nurses, such as *CINAHL* and the *Nursing Reference Center*
- Other excellent resources: *MEDLINE*, *DynaMed*, *Cochrane*, *Natural Standard*
- Gives practitioners access to timely, evidence-based answers to patient care Q's

How do I access HEAL-WA?

- Site address: *heal-wa.org*
- Use the “Getting Started” links to set up your UW NetID and password
 - You will need your RN license number in order to set up your UW NetID (even if you hold an advanced practice license)



You are here: Home

- Professional Toolkits
- Acupuncturist
- Chiropractor
- Massage Practitioner
- Mental Health Counselor, Psychologist, Licensed Social Worker
- Naturopath
- Optometrist
- Physician, PA, ARNP
- Podiatrist
- Registered Nurse

Welcome to HEAL-WA

HEAL-WA is a collection of health information resources funded by license fees from selected health care providers in Washington State. Its mission is to provide evidence-based information to support patient care.

MEDLINE® with Full Text is now available!

Getting Started

Certain resources in HEAL-WA (indicated by a lock icon) require a HEAL-WA access code (UW NetID) and password for access.

Set up HEAL-WA access - If you need to set up a HEAL-WA access code (UW NetID) and password, or if you have a UW NetID and need to add HEAL-WA affiliation to it, see the instructions on the Getting Started page.

PLEASE NOTE that once you have set up your UW NetID, it can take up to a day for your UW NetID to be recognized so you can log in to HEAL-WA.

If you have already set up your HEAL-WA access code (UW NetID) and password, log in to HEAL-WA by clicking on the "HEAL-WA Access" button at the upper right hand corner of the screen.

Dec 19, 2008 09

Influenza A (H1N1) Information

Influenza (Dynamed)

- US Centers for Disease Control and Prevention - Influenza A (H1N1)
- Washington State Department of Health Swine Influenza (H1N1) information
- H1N1 Influenza - Patient information on MedlinePlus
- Links to other Federal and Washington State information

Apr 17, 2009 11

- News
- New, easier full text journal access Jul 28, 2009
- MEDLINE® with Full Text is now available! Jun 23, 2009
- New Clinical Calculators in DynaMed May 14, 2009
- PsycInfo and other databases now available Mar 06, 2009
- More news...

Diagnosis & Therapy

- Dynamed (Diseases & Conditions)
- Merck Manual of Diagnosis and Therapy
- Merck Manual of Geriatrics

Guidelines & Evidence

- Cochrane Database of Systematic Reviews
- Clinical Information from the Agency for Healthcare Research and Quality
- National Guideline Clearinghouse
- PubMed Clinical Queries

Search for Articles

- MEDLINE® with Full Text

Drugs, Labs, Diagnostic Tests

- AHFS Drug Information® (2008)
- Drug Information Portal
- LactMed

Complementary & Alternative Medicine

- AMED (Alternative & Natural Medicine Database)
- Alt-HealthWatch
- Natural Standard

Prevention, Screening, Immunizations

- Guide to Clinical Preventive Services
- Immunization Schedules
- Red Book®: 2006 Report of the Committee on Infectious Diseases - 27th Ed.
- The Guide to Community Preventive Services (Community

Patient Care Management

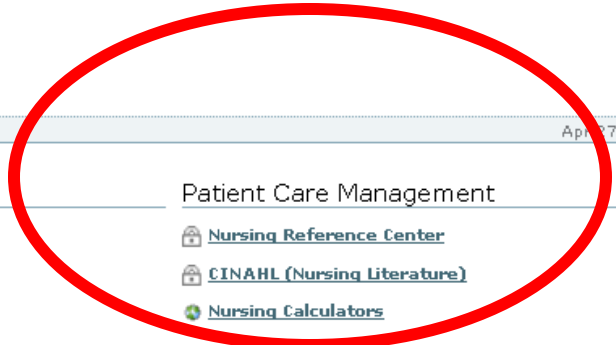
- Nursing Reference Center
- CINAHL (Nursing Literature)
- Nursing Calculators

Information for Patients

- AHFS Consumer Medication Information
- MedlinePlus - Health Information for Patients
- MedlinePlus Health Information in Other Languages (for patients)
- Merck Manual - Home Edition










Contact HEAL-WA

- Send Us Feedback
- Requesting Articles





Registered Nurse

Professional Toolkits

-  [Acupuncturist](#)
-  [Chiropractor](#)
-  [Massage Practitioner](#)
-  [Mental Health Counselor, Psychologist, Licensed Social Worker](#)
-  [Naturopath](#)
-  [Optometrist](#)
-  [Physician, PA, ARNP](#)
-  [Podiatrist](#)
-  [Registered Nurse](#)

News




 [Influenza A \(H1N1\) Information Links](#)
Dec 10, 2009

 [New full text journals now available through MEDLINE and CINAHL](#)



Registered Nurse

There are no restrictions on access to HEAL-WA resources for eligible users - if you can log in to HEAL-WA, you can use any resources contained anywhere on the site. HEAL-WA Toolkits were developed strictly for users' convenience, and are meant to bring together resources that a practitioner group might be most likely to use.




Nursing Resources

-  [Nursing Reference Center](#)
-  [CINAHL \(Nursing Literature\)](#)
-  [MEDLINE® with Full Text](#)

Calculators & Tools

-  [Nursing Calculators](#)
-  [MedCalc3000](#)





Drugs, Labs, & Diagnostic Tests

-  [Davis's Comprehensive Handbook of Laboratory and Diagnostic Tests - with Nursing Implications - 2nd Ed. \(2006\)](#)
-  [Davis's Drug Guide for Nurses - 11th Ed. \(2009\)](#)
-  [Laboratory Tests and Diagnostic Procedures with Nursing Diagnoses - 7th Ed. \(2008\)](#)

Complementary & Alternative Medicine

-  [Natural Standard](#)

Patient Education

-  [Detailed Drug Information for the Consumer™](#)
-  [AAFP Conditions A to Z \(2009\)](#)
-  [MedlinePlus - Health Information for Patients](#)
-  [National Center for Complementary and Alternative Medicine Health Topics A-Z](#)

Multicultural Information

-  [EthnoMed](#)

ARNP

Professional Toolkits

- [Acupuncturist](#)
- [Chiropractor](#)
- [Massage Practitioner](#)
- [Mental Health Counselor, Psychologist, Licensed Social Worker](#)
- [Naturopath](#)
- [Optometrist](#)
- [Physician, PA, ARNP](#)
- [Podiatrist](#)
- [Registered Nurse](#)

News

[Influenza A \(H1N1\) Information Links](#)
Dec 10, 2009

[New full text journals now available through MEDLINE and CINAHL](#)

Physician, PA, ARNP

There are no restrictions on access to HEAL-WA resources for eligible users - if you can log in to HEAL-WA, you can use any resources contained anywhere on the site. HEAL-WA Toolkits were developed strictly for users' convenience, and are meant to bring together resources that a practitioner group might be most likely to use.

Diagnosis & Therapy

- [DynaMed \(Diseases & Conditions\)](#)
- [Merck Manual of Diagnosis and Therapy](#)
- [Current Medical Diagnosis & Treatment \(2009\)](#)

Search for Articles

- [PubMed Clinical Queries](#)
- [MEDLINE® with Full Text](#)
- [MANTIS](#)

Drugs

- [AHFS Drug Information® \(2008\)](#)
- [Drug Information Portal](#)
- [LactMed](#)

Tools & Calculators

- [MedCalc3000](#)

Reference & Other Resources

- [PAL: Partnership Access Line \(Mental Health Consultation Outreach for children\)](#)

Information for Patients

- [AAFP Conditions A to Z \(2009\)](#)
- [MedlinePlus - Health Information for Patients](#)
- [MedlinePlus Health Information in Other Languages \(for patients\)](#)

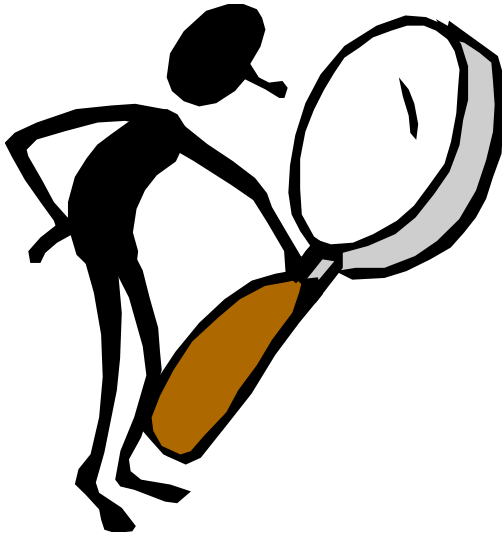
Complementary & Alternative Medicine

- [Natural Standard](#)

Multicultural Information

- [EthnoMed](#)

— Send this — Print this —



Search for the Best Evidence to answer the Question

Search Databases Efficiently for Research Journal Articles

- Primary literature: **MEDLINE/PubMed** or **CINAHL**
References to original journal articles on a topic
 - Some with full-text links
 - Most with abstracts
- You will see same interface when searching *MEDLINE* or *CINAHL* (or *Cochrane*) on HEAL-WA

CINAHL or [CINAHL Plus]

- Cumulative Index to Nursing and Allied Health Literature
- Provides coverage from 1982 [1937] to date, of nursing and 17 allied health disciplines literature
- 1700+ [3800+] journals indexed including virtually all English-language nursing journals
- Can easily search for **Research** articles

CINAHL Search Screen



Searching: **CINAHL with Full Text** | [Choose Databases >](#)

Suggest Subject Terms

hyperbaric oxygenation in Select a Field (optional) ?

and wound healing in Select a Field (optional)

and diabetic foot in Select a Field (optional) [Add Row](#)

[Basic Search](#) | [Advanced Search](#) | [Visual Search](#) | [Search History/Alerts](#) | [Preferences >](#)

Search Options

Search modes ?

- Boolean/Phrase
- Find all my search terms
- Find any of my search terms
- SmartText Searching [Hint](#)

Apply related words

Also search within the full text of the articles

Limit your results

Full Text

Abstract Available

Published Date from Month ▼ Year: to Month ▼ Year:

Peer Reviewed

Research Article

Exclude MEDLINE records

Clinical Queries All

- Therapy - High Sensitivity
- Therapy - High Specificity
- Therapy - Best Balance

Publication Type Standards

- Statistics
- Systematic Review
- Tables/Charts

Gender All

- Female
- Male

References Available

Publication Year from to

Author

Publication

English Language

Exclude Pre-CINAHL

Evidence-Based Practice

Journal Subset All

- Africa
- Allied Health
- Alternative/Complementary Therapies

Language All

- Afrikaans
- Chinese
- Danish

Pregnancy

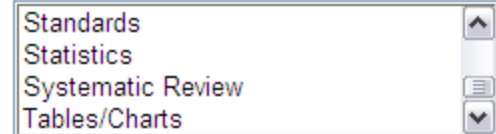
Inpatients

Outpatients

CINAHL Publication Type Limits

- Clinical trial
- Critical path
- Practice guidelines
- Research
- Standards
- Systematic review

Publication Type



CINAHL Results



Searching: **CINAHL with Full Text** | [Choose Databases >](#)

Suggest Subject Terms

hyperbaric oxygenation in ?
and in
and in [Add Row](#)

[Basic Search](#) | [Advanced Search](#) | [Visual Search](#) | [Search History/Alerts](#) | [Preferences >](#)

[HEAL-WA](#)

Narrow Results by

Source Types

[All Results](#)

[Periodicals](#)

Subject: Major Heading

[Wound Healing](#)

[Diabetic Foot](#)

[Foot Ulcer](#)

[Leg Ulcer](#)

[Wounds, Chronic](#)

[Fibroblasts](#)

[More >](#)

[Publication](#)

[Age](#)

[Gender](#)

Results: 1-12 of 12 Page: 1

Sort by: [Add \(1-12\)](#)

Results for: hyperbaric oxygenation and diabetic foot and wound... Options set [Alert / Save / Share >](#)

Search Mode: Boolean/Phrase

1. [Does hyperbaric oxygenation therapy benefit in the treatment of non-healing wounds in diabetic patients?](#)



As the incidence of diabetes mellitus type II is steadily increasing in our society, diabetic non-healing lower extremity wounds are complicating patient care. Hospitalization and amputation rate... (includes abstract); Novaleski C; Internet Journal of Academic Physician Assistants, 2009; 6 (2). (9p) (journal article - *research*, tables/charts) ISSN: 1092-4078 CINAHL AN: 2010177105

Database: CINAHL with Full Text

[Add to folder](#) | [Cited References:](#)

[HTML Full Text](#)

link to full text

2. [Effect of hyperbaric oxygen therapy on healing of diabetic foot ulcers.](#)



Hyperbaric oxygen therapy can be used as an adjunct to standard wound care in the treatment of diabetic patients with foot ulcers. We undertook a prospective, randomized investigation of the use ... (includes abstract); Duzgun AP; Satir HZ; Ozozan O; Saylam B; Kulah B; Coskun F; Journal of *Foot & Ankle Surgery*, 2008 Nov-Dec; 47 (6): 515-9 (journal article - clinical trial, *research*, tables/charts) ISSN: 1067-2516 PMID: 19239860 CINAHL AN: 2010124171

Database: CINAHL with Full Text

[Add to folder](#) | [Cited References: \(23\)](#)

3. [The case for evidence in wound care: investigating advanced treatment modalities in healing chronic diabetic lower extremity wounds.](#)



BACKGROUND: Major complications of diabetes mellitus include lower leg and foot ulcers, which can result in amputation. Further study is needed to determine optimal treatments for these challengi... (includes abstract); Lyon KC; Journal of *Wound, Ostomy & Continence Nursing*, 2008 Nov-Dec; 35 (6): 585-90 (journal article - pictorial, *research*, tables/charts) ISSN: 1071-5754 PMID: 19018198 CINAHL AN: 2010121597

Database: CINAHL with Full Text

[Add to folder](#) | [Cited References: \(13\)](#)

[Full Text from OVID](#)

link to full text

Limit your results

- Full Text
- References Available
- Abstract Available

Filter by Publication Date:

1997 2009



[Search Options](#) Options set

Searching CINAHL Plus: Cumulative Index to Nursing and Allied Health Literature

What is CINAHL Plus?

CINAHL Plus with Full Text provides access to the literature in nursing and 17 allied health disciplines dating back to 1937. Over 3800 journals are indexed including virtually all English language nursing journals along with selected titles in biomedicine, alternative therapies, and consumer health. It also offers access to Evidence-Based Care Sheets, searchable cited references, and over 350 research instrument descriptions.

Getting Connected

Connect through the HealthLinks > Resources > Databases page, or type CINAHL Plus in the Search box on the upper right corner of HealthLinks and follow the link.



Searching

Step 1: Enter your terms

- Type your search terms into the search boxes on the Advanced screen. Choose the field(s) you want to search from the pull down boxes and click **Search**.
- Use the asterisk (*) to search word roots, e.g. *transplant** retrieves transplant, transplants, or transplantation

Step 2: Limit your results

- Narrow your search to a lower number of more precise results by selecting desired Age Groups, Language, Publication Type, Peer Reviewed, Research Article, etc. from the options available below the search boxes, and click **Search**.

- Searching for research instruments:

- Search for a description of an instrument and possible full text using the research instrument Publication Type (PT): Type *Rosenberg self esteem scale* in one Search box and *research instrument* in another box and select the Publication Type field.
- Search for studies that use a particular instrument by using the Instrumentation field (IN): Type *Rosenberg self esteem scale* and choose the Instrumentation field.

Step 3: Combining Sets/Search History

- Click **Clear** next to the search boxes to remove the current search terms.
- Click **Search History/Alerts** and select the search sets to combine by clicking the Add to Search box. Choose the desired Boolean operator (AND, OR, etc.) from the *Combine searches with:* drop down box, and then **Add** and **Search**.
- Alternatively, combine results by typing a search number into a new Search box, i.e., *s1 and s2 or (keyword(s) and s1)*, and click **Search**.

Search using CINAHL Headings, Subheadings, Major Concept, and Explode

In most cases, the most efficient way to search is by using **CINAHL Headings**, the thesaurus terms used to assign subject headings to the articles in the database. Click **CINAHL Headings** at the top of the page and type your term in the Search box. Click Browse. Click **Scope** to see a definition of the term. Clicking on the Subject Heading itself will lead you to more information about the heading in the Tree, or hierarchical view of terms. You can select **Subheadings** if needed and may also specify that the term be a **major focus** of the article by checking the Major Concept box.

MEDLINE [on HEAL-WA] or PubMed

- MEDLINE (1940's+) is included on PubMed
- Indexes 5,000 biomedical journals
- Covers all aspects of biosciences and healthcare
- 75%-80% of citations have abstracts
- Updated 5x/week

2 MEDLINE/PubMed Strategies for Finding Evidence-Based Citations

1. Use Publication Type limits
 - Randomized Controlled Trial
 - Meta-Analysis
 - Practice Guideline
 - Clinical Trial
 - Consensus Development Conference
2. Use Clinical Queries

MEDLINE Search Screen

Searching: MEDLINE with Full Text | [Choose Databases >](#)

[HEAL-WA](#)



Suggest Subject Terms

hyperbaric oxygenation in MM Exact Major Subject Heading

and wound healing in MM Exact Major Subject Heading

and diabetic foot in Select a Field (optional) [Add Row](#)

[Search](#) [Clear](#) ?

[Basic Search](#) | [Advanced Search](#) | [Visual Search](#) | [Search History/Alerts](#) | [Preferences >](#)

Narrow Results by

Subject: Major Heading

- [Diabetic Foot therapy](#)
- [Wound Healing physiology](#)
- [Hyperbaric Oxygenation](#)
- [Wound Healing](#)
- [Hyperbaric Oxygenation methods](#)
- [Diabetic Foot physiopathology](#)

[More >](#)

[Subject](#)

[Publication](#)

[Age](#)

[Gender](#)

Results: 1-20 of 21 Page: 1 [2](#) [Next](#)

Sort by: [Date Descending](#) [Add \(1-20\)](#)

Results for: MM hyperbaric oxygenation and MM wound healing and...

[Alert / Save / Share >](#)

Search Mode: Boolean/Phrase

- [A three species model to simulate application of Hyperbaric Oxygen Therapy to chronic wounds.](#)
Chronic wounds are a significant socioeconomic problem for governments worldwide. Approximately 15% of people who suffer from diabetes will experience a lower-limb ulcer at some stage of their li...
(eng; includes abstract) By Flegg JA, McElwain DL, Byrne HM, Turner IW, Plos Computational Biology [PLoS Comput Biol], ISSN: 1553-7358, 2009 Jul; Vol. 5 (7), pp. e1000451; PMID: 19649306
Database: MEDLINE with Full Text
[Add to folder](#)
- [Hyperbaric oxygen therapy for wound healing and limb salvage: a systematic review.](#)
This article is a systematic review evaluating published clinical evidence of the efficacy of hyperbaric oxygen therapy (HBOT) for wound healing and limb salvage. The data source is the Ovid/Med...
(eng; includes abstract) By Goldman RJ, PM & R: The Journal Of Injury, Function, And Rehabilitation [PM R], ISSN: 1934-1482, 2009 May; Vol. 1 (5), pp. 471-89; PMID: 19627935
Database: MEDLINE with Full Text
[Add to folder](#)
- [Can major amputation rates be decreased in diabetic foot ulcers with hyperbaric oxygen therapy?](#)
Although hyperbaric oxygen therapy has been used for diabetic foot ulcer since the 1980s, there is little information on its efficacy. The aim of this study is to evaluate whether hyperbaric oxyg...
(eng; includes abstract) By Kaya A, Aydin F, Altay T, Karapinar L, Ozturk H, Karakuzu C, International Orthopaedics [Int Orthop], ISSN: 1432-5195, 2009 Apr; Vol. 33 (2), pp. 441-6; PMID: 18654777
Database: MEDLINE with Full Text
[Add to folder](#)
- [Effect of hyperbaric oxygen therapy on healing of diabetic foot ulcers.](#)
Hyperbaric oxygen therapy can be used as an adjunct to standard wound care in the treatment of diabetic patients with foot ulcers. We undertook a prospective, randomized investigation of the use ...

Limit your results

- Full Text
- Abstract Available
- English Language

Filter by Publication Date:

1997 2009

1997 2009

[Update Results](#)

[Search Options](#)

Search Options

Search modes ?

- Boolean/P
- Find all my
- Find any o
- SmartText

Can easily limit your search to:

- Age groups
- Human or Animal studies
- Language
- Research or Review articles
- Subsets, such as Core Clinical Journals or CAM or Nursing Journals

Limit your results

Full Text	<input type="checkbox"/>	Date of Publication from	Month: <input type="text"/> Year: <input type="text"/> to Month: <input type="text"/> Year: <input type="text"/>
Publication	<input type="text"/>	Author	<input type="text"/>
Abstract Available	<input type="checkbox"/>	English Language	<input checked="" type="checkbox"/>
EBM Reviews	<input type="checkbox"/>	Review Articles	<input type="checkbox"/>
Human	<input checked="" type="checkbox"/>	Animal	<input type="checkbox"/>
Gender	<input type="text" value="All"/>	Age Related	<input type="text" value="All"/>
Clinical Queries	<input type="text" value="All"/>	Subject Subset	<input type="text" value="All"/>
Journal & Citation Subset	<input type="text" value="HISTLINE History of Medicine"/>	Publication Type	<input type="text" value="Randomized Controlled Trial"/>
Languages	<input type="text" value="All"/>	Animals	<input type="text" value="All"/>
Image Quick View	<input type="checkbox"/>	Image Quick View Types	<input type="checkbox"/> Black and White <input type="checkbox"/> Chart <input type="checkbox"/> Photograph <input type="checkbox"/> Color Photograph

wound healing diabetic foot hyperbaric oxygenation

Preview

Clear

Advanced Search

No history available - see [Help](#)

Strategy #1 on PubMed:
Limit to RCTs under Type of Article

Search History

- Search History will be lost after eight hours of inactivity.
- Search numbers may not be continuous; all searches are represented.

Limit by Topics, Languages, and Journal Groups

Full Text, Free Full Text, and Abstracts

CLEAR

- Links to full text Links to free full text Abstracts

Humans or Animals

CLEAR

- Humans Animals

Gender

CLEAR

- Male Female

Type of Article

CLEAR

- Editorial
- Letter
- Meta-Analysis
- Practice Guideline
- Randomized Controlled Trial

Languages

CLEAR

- English
- French
- German
- Italian
- Japanese

Subsets

CLEAR

- Core clinical journals
- Dental journals
- Nursing journals

Topics

- AIDS

Ages

CLEAR

- All Infant: birth-23 months
- All Child: 0-18 years
- All Adult: 19+ years
- Newborn: birth-1 month
- Infant: 1-23 months

Search: PubMed

[RSS](#) [Save search](#) [Advanced search](#) [Help](#)

[Display Settings:](#) Summary, 20 per page, Sorted by Recently Added

[Send to:](#)

Limits Activated: Humans, Randomized Controlled Trial, English
[Change Remove](#)

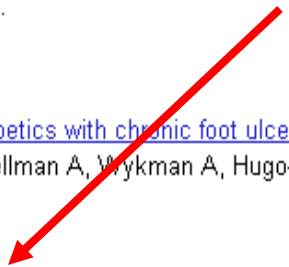
Results: 8

- [Hyperbaric oxygen, oxidative stress, NO bioavailability and ulcer oxygenation in diabetic patients.](#)
1. Efrati S, Gall N, Bergan J, Fishlev G, Bass A, Berman S, Hamad-Abu R, Feigenzon M, Weissgarten J. Undersea Hyperb Med. 2009 Jan-Feb;36(1):1-12. PMID: 19341122 [PubMed - indexed for MEDLINE] [Related articles](#)

- [Effect of hyperbaric oxygen therapy on healing of diabetic foot ulcers.](#)
2. Duzgun AP, Satir HZ, Ozozan O, Saylam B, Kulah B, Coskun F. J Foot Ankle Surg. 2008 Nov-Dec;47(6):515-9. Epub 2008 Sep 16. PMID: 19239860 [PubMed - indexed for MEDLINE] [Related articles](#)

- [A prospective study: hyperbaric oxygen therapy in diabetics with chronic foot ulcers.](#)
3. Löndahl M, Katzman P, Nilsson A, Hammarlund C, Sellman A, Wykman A, Hugo-Persson M, Apelqvist J. J Wound Care. 2006 Nov;15(10):457-9. PMID: 17124820 [PubMed - indexed for MEDLINE] [Related articles](#)

- [Effect of hyperbaric oxygen on cardiac neural regulation in diabetic individuals with foot complications.](#)
4. Sun TB, Yang CC, Kuo TB. Diabet Med. 2006 Apr;23(4):360-6. PMID: 16620263 [PubMed - indexed for MEDLINE] [Related articles](#)



Filter your results:
All (8)
[University of Washington Online \(4\)](#)
[Manage Filters](#)

Find related data


Database:

Search details

```
{("wound healing"[MeSH Terms] OR ("wound"[All Fields] AND "healing"[All Fields]) OR "wound healing"[All Fields]) AND ("diabetic foot"[MeSH Terms] OR ("diabetic"[All
```

Display Settings: Abstract

Send to:

 **Limits Activated:** Humans, Randomized Controlled Trial, English

[Change](#) [Remove](#)

Diabet Med. 2006 Apr;23(4):360-6.

Effect of hyperbaric oxygen on cardiac neural regulation in diabetic individuals with foot complications.

Sun TB, Yang CC, Kuo TB.

Institute of Medical Sciences, Tzu Chi University, Hualien, Taiwan.

AIMS: There are relatively few effective methods to treat autonomic neuropathy in patients with diabetes mellitus. Our aim was to test the hypothesis that hyperbaric oxygen therapy may restore cardiac neural regulation dysfunction in diabetic individuals with foot complications. **METHODS:** We conducted a prospective randomized controlled study in patients with diabetic foot problems. Daily heart-rate variability analysis from 5-min electrocardiography was used to evaluate the temporal change of cardiac neural regulation. The experimental group consisted of 23 subjects exposed to hyperbaric oxygen therapy of 202.65 kPa for 90 min every Monday to Friday for 4 weeks (20 treatments). The control group consisted of 15 age-, sex- and disease-matched subjects who were not exposed to hyperbaric therapy. Patients with medical complications and failure of wound healing were excluded to eliminate possible confounding effects. **RESULTS:** There was no significant difference in baseline R-R interval (RR), variance, high-frequency power (HF), low-frequency power (LF), and LF/HF ratio between the two groups. In the hyperbaric oxygen group there were significant increases in changes of RR (82.7 +/- 16.02 ms); variance 0.88 +/- 0.12 ln(ms²); HF 1.06 +/- 0.18 ln(ms²); and LF 0.87 +/- 0.15 ln(ms²) after the treatment. Measurements of tissue oxygen demonstrated significant increases in local tissue oxygenation in the hyperbaric oxygen group (53.0 +/- 2.6 mmHg) compared with the control group (27.5 +/- 3.1 mmHg), P < 0.05. **CONCLUSION:** Hyperbaric oxygen therapy has a significant vagotonic effect, which is beneficial in improving cardiac neural regulation in patients with diabetic autonomic dysfunction.

PMID: 16620263 [PubMed - indexed for MEDLINE]

 FULL TEXT ONLINE 

[Check for UW holdings](#)

Related articles

- ▶ Hyperbaric oxygen (HBO) therapy in treatment of diabetic fo[J Diabetes Complications. 2002]
- ▶ Effect of hyperbaric oxygen therapy on healing of diabetic foot ulcers[J Foot Ankle Surg. 2008]
- ▶ Hyperbaric oxygen, oxidative stress, NO bioavailability ar[Undersea Hyperb Med. 2009]
- ▶ **Review** Hyperbaric oxygen therapy and the diabetic foot. [Diabetes Metab Res Rev. 2000]
- ▶ **Review** Treatment of diabetic foot ulcers with hyperbaric oxygen. [J Wound Care. 2000]

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PubMed Clinical Queries

This page provides the following specialized PubMed searches for clinicians:

- [Search by Clinical Study Category](#)
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- [Medical Genetics Searches](#)

#2 Strategy: Clinical Queries
Link found on Adv Search screen

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This search finds citations that correspond to a specific clinical study category. The search may be either broad and sensitive or specific. The search filters are based on the work of [Haynes RB et al.](#) See the [filter table](#) for details.

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- Coverage: 1982+
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Information Overload!

- 2 million articles published in biomedical journals each year
- considering everything of potential biomedical importance would require perusing about 6,000 articles per day...
- If you only read 2 articles a day, at the end of year you would be 60 centuries behind.

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- Deliver current citations into your email
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- **Nursing Reference Center [on HEAL-WA]**
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Diabetic foot ulcer

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Diabetic foot ulcer

Updated 2010 Jan 07 03:51 PM: review of diabetic foot ulcer (BMJ 2009 Dec 2)
traditional dressings appear similar effective but more cost-effective compared to Aquacel dressing (Health Technol Assess 2009 Nov)
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Low-molecular-weight heparins:



- **[dalteparin](#) improves healing of chronic foot ulcers in patients with diabetes and peripheral arterial disease ([level 1 \[likely reliable\] evidence](#))** ←
 - based on randomized trial
 - 87 patients randomized to [dalteparin](#) (Fragmin) 5,000 units vs. saline subcutaneously once daily until ulcer healing or maximum 6 months
 - comparing dalteparin vs saline
 - ulcer healing with intact skin in 32% vs. 21% (NNT 10)
 - ulcer area decreased by 50% or more (or healed) in 67.4% vs. 47.6% (NNT 5)
 - amputation in 4.5% vs. 18.6% (NNT 7)
 - Reference - [Diabetes Care 2003 Sep;26\(9\):2575 full-text](#), commentary can be found in Evidence-Based Medicine 2004 May-Jun;9(3):73
- **bemiparin may not improve complete ulcer healing in patients with chronic diabetic foot ulcers ([level 2 \[mid-level\] evidence](#))**
 - based on randomized trial with inadequate power to rule out clinically significant differences
 - 70 diabetic patients > 8 years old with foot ulcer > 3 months randomized to bemiparin vs. placebo
 - bemiparin 3,500 units/day given for 10 days followed by 2,500 units/day for ≤ 3 months
 - both groups received usual care
 - comparing bemiparin vs. placebo
 - ulcer improvement by digital photography in 70.3% vs. 45.5% (p = 0.035, NNT 4, 95% CI for NNT 2-43)
 - complete healing at 3 months in 35.1% vs. 33.3% (not significant)
 - similar number of adverse events between groups
 - Reference - [Diabet Med 2008 Sep;25\(9\):1090](#)  [EBSCOhost Full Text](#) ←

Granulocyte-colony stimulating factor (G-CSF):

- **granulocyte-colony stimulating factor (G-CSF) may reduce amputation risk in patients with diabetic foot infections ([level 2 \[mid-level\] evidence](#))**
 - based on Cochrane review with clinical heterogeneity of studies
 - systematic review identified 5 randomized trials comparing G-CSF to placebo or no added growth factor in 167 patients with diabetic foot infections
 - all patients received usual care with antibiotics
 - clinical heterogeneity of studies included
 - patients with varying degrees of infection severity

Guidelines: 

United States guidelines:

- Infectious Diseases Society of America (IDSA) guideline on diagnosis and treatment of diabetic foot infections can be found in [Clin Infect Dis 2004 Oct 1;39\(7\):885](#)  [EBSCOhost Full Text full-text](#) or at [National Guideline Clearinghouse 2005 Jan 31:5888](#), summary can be found in [Am Fam Physician 2005 Apr 1;71\(7\):1429](#)
- Wound Healing Society guideline for treatment of diabetic ulcers can be found in [Wound Repair Regen 2006 Nov-Dec;14\(6\):680](#)  [EBSCOhost Full Text](#)
- American College of Foot and Ankle Surgeons clinical practice guideline on diabetic foot disorders can be found in [J Foot Ankle Surg 2006 Sep-Oct;45\(5 Suppl\):S1](#) or at [National Guideline Clearinghouse 2007 Jan 22:9846](#)
- American Diabetes Association (ADA) guidelines
 - American Diabetes Association (ADA) standards of medical care in diabetes can be found in [Diabetes Care 2009 Jan;32 Suppl 1:S13 full-text](#)
 - prevention and management of diabetes complications can be found in [Diabetes Care 2007 Jan;30\(Suppl 1\):S15-24](#) or at [National Guideline Clearinghouse 2008 Jun 2:12185](#)
 - policy statement on preventive foot care in diabetes can be found in [Diabetes Care 2004 Jan;27\(suppl 1\):S63-S64](#)
- American Society of Plastic Surgeons guideline on chronic wounds of lower extremity can be found at [National Guideline Clearinghouse 2007 Nov 5:11513](#)
- Wound, Ostomy, and Continence Nurses Society (WOCN) guideline for management of wounds in patients with lower-extremity neuropathic disease can be found at [National Guideline Clearinghouse 2005 Jan 17:5912](#)

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Evidence-based care sheet

Pancreatitis, Acute: Pain Control

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Evidence-Based Care Sheet

By: Darlene A. Strayer, RN, MBA; Tanja Schub, BS
Edited by: Diane Pravikoff, RN, PhD, FAAN
Cinahl Information Systems

What We Know

- Acute pancreatitis (AP) is a rapidly developing, potentially fatal inflammatory disorder of the pancreas, with diverse involvement of other organ systems; AP can be mild to severe, with a clinical course that varies widely from patient to patient.⁽⁴⁾⁽⁵⁾⁽⁶⁾ (See *Quick Lesson About... Pancreatitis, Acute*; CINAHL Accession Number: 5000000256)
 - The inflammation caused by dysfunctionally activated pancreatic enzymes in AP has a direct effect on sensory nerves at spinal cord level T5–T9, which results in visceral pain⁽¹⁾⁽⁶⁾⁽⁷⁾
 - Gradually increasing abdominal pain that plateaus after several hours is the primary characteristic of mild AP; pain that persists more than a few days is associated with the development of complications that characterize severe AP⁽¹⁾⁽³⁾⁽⁴⁾⁽⁵⁾
 - Pain may radiate from the abdomen to the back or chest
 - Pain is exacerbated by eating foods high in fat or drinking alcoholic beverages, or when the patient is in a supine position
 - Although rare, painless mild AP may occur in association with postoperative states, renal transplantation, peritoneal dialysis, diabetic ketoacidosis, and shock of unknown origin
 - Providing adequate pain control is an essential treatment strategy for patients with AP⁽⁵⁾⁽⁶⁾
 - Narcotic (i.e., opioid) analgesia is usually required because alternatives (i.e., nonopioid analgesia medications) are completely ineffective in alleviating the pain of severe AP⁽²⁾⁽⁵⁾⁽⁷⁾
 - The traditional belief that opioid analgesia causes additional pancreatic dysfunction is unsupported by clinical trial evidence⁽⁵⁾⁽⁶⁾⁽⁷⁾⁽⁸⁾
 - Pain management with patient-controlled analgesia (PCA) is common because oral intake is restricted; PCA-infused narcotic analgesics typically prescribed for patients with AP are⁽²⁾⁽⁶⁾⁽⁷⁾⁽⁸⁾

Related Information

- [Quick Lessons](#)
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EVIDENCE-BASED CARE SHEET

Pressure Ulcers: Hospital-Acquired

What We Know

- According to the United States Department of Health and Human Services Agency for Healthcare Research and Quality, the number of hospital patients with one or more pressure ulcers (PUs) rose from 280,000 in 1993 to 455,000 in 2003, a 63% increase⁽¹⁾
- PUs (also known as decubitus ulcers, pressure sores, and bedsores) are localized areas of skin/soft tissue breakdown. Prolonged pressure is the main cause of PUs, usually when soft tissue becomes compressed between a bony prominence (where bone is closest to skin) and an external surface. This compression can result in ischemia, cell death, and tissue necrosis^(2, 5) (See the series of *Evidence-Based Care Sheets* and *Quick Lessons* on PUs)
 - Pressure of 7 mmHg over a bony prominence for more than 2 hours is enough to cause the development of a PU⁽³⁾
- PUs may develop anywhere on the body, but most develop over bony prominences. Some 96% of PUs are found on the lower body, with the hip and buttock region accounting for almost 70% of all PUs⁽²⁾
- Patients in critical care units have a 33% higher risk of developing a hospital-acquired PU compared to other hospitalized patients⁽³⁾
 - Older patients (e.g., aged sixty and older) admitted to acute care hospitals for non-elective orthopedic procedures, including hip replacement and treatment of long bone fractures, have a 66% greater incidence of developing a hospital-acquired PU⁽³⁾
- Reducing the annual number of hospital-acquired PUs is an objective for the Joint Commission, National Patient Safety Committee, and Healthy People 2010, and is considered a quality of care indicator⁽¹⁾
 - Medicare regulation CMS-1390-F stipulates that PUs acquired during an inpatient stay are no longer considered a covered (i.e., reimbursable) condition as of October 1, 2008⁽²⁾
- The primary admitting diagnosis for a patient who develops a PU while hospitalized is usually one of the following: septicemia, pneumonia, urinary tract infection, congestive heart failure, rehabilitation care, fluid and electrolyte disorders, and complications related to diabetes mellitus^(3, 4)
- Critically ill patients are at higher risk of developing hospital-acquired PUs than are patients in general care areas due to several factors, including^(1, 3)
 - greater severity of illness
 - increased length of hospital stay
 - poor tissue perfusion due to hemodynamic instability
 - skin maceration due to moisture
 - immobility
 - poor nutritional status
- PUs are caused by both intrinsic and extrinsic factors^(1, 4)
- Internal factors include immobilization, cognitive deficit, chronic illness (e.g., diabetes mellitus), poor nutrition, use of steroids, and advanced age (older than 60 years)^(5, 6)
- The four external factors that contribute to the development of hospital-acquired PUs are pressure, friction, humidity, and shear force^(5, 6)
- In February 2007, the U.S. National Pressure Ulcer Advisory Panel (NPUAP) revised the staging system for pressure ulcers; in addition to the existing 4 stages (I-IV), deep tissue injury (DTI) and unstageable categories were added. The addition of DTI and unstageable categories clarified a staging process based heavily on visual identification⁽²⁾
 - DTI refers to a localized area of discolored (commonly purple or maroon) but intact skin with damage to the underlying soft tissue from pressure and/or shear
 - Unstageable refers to a wound whose stage cannot be determined until enough slough or eschar is

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- Hospital-acquired PUs can cause necrosis and damage that extends to muscle and/or bone, leading to potentially life threatening complications such as sepsis and osteomyelitis^(1, 3)
- Treatment includes alleviation of pressure, proper nutrition and hydration, application of dressings and topical ointments, debridement, and/or surgery, depending on the type and stage of the PU. Adjunctive treatment (e.g., radiant heat, negative pressure, cytokine growth factors) may be ordered to promote PU healing^(2, 5)

What We Can Do

- Learn more about hospital-acquired PUs so you can accurately assess your patients' personal characteristics and health education needs; share this knowledge with colleagues^(1, 6)
- At admission, assess all of your patients for existing PUs and for risk of developing a hospital-acquired PU, and document findings^(1, 3, 4, 6)
 - Use a risk assessment scale (e.g., Braden, Norton), if available, to assess your patient's risk for hospital-acquired PUs⁽⁶⁾
 - Reassess risk of developing a hospital-acquired PU at intervals during the inpatient stay, depending on the patient's condition and facility guidelines
 - Regularly monitor the status and condition of existing PUs using an accepted healing scale/assessment tool (e.g., Pressure Ulcer Scale for Healing [PUSH] Tool)^(2, 6)
 - Perform a blanch test to evaluate blood flow (redness may not be visible during a blanch test in individuals with darker skin; skin may appear darker than normal or bluish/purple). Check for blisters, sores, redness, warmth, swelling, indurations, and craters
 - If applicable, note color, size, location, and depth of existing PUs and if malodorous drainage is present⁽⁶⁾
- Request referral, as appropriate, to a wound specialist, dermatologist, physical therapist, occupational therapist, and registered dietitian to resolve health compromise and complications in individuals with PU^(2, 3, 5)
- Administer prescribed treatment based on the stage of the PU. Principles of nursing care and treatment for all wound stages include the following^(2, 3, 5) (For more information on PU treatment, see *Evidence Based Care Sheet: Pressure Ulcers: Treatment*; CIN: AHL Accession Number: 5000004183)
 - Clean PUs with normal saline solution and keep dry. Avoid using cytotoxic topical antiseptics (e.g., povidone-iodine, acetic acid), which may impair wound healing
 - Protect the patient from further injury (e.g., reduce friction and shear)
 - Properly position the patient and turn at least every 2 hours. Do not place patient on a PU site. Position head of bed at 30° angle or less than 30° in a side-lying position
 - Provide patient with a high-calorie/high-protein diet and adequate hydration. If needed, administer prescribed enteral nutrition or total parenteral nutrition
 - Manage urinary/bowel incontinence with the use of underpads, diapers, or briefs
 - Properly cleanse and dry the patient's skin as soon as possible after each incident of incontinence
 - Follow facility infection control protocols and monitor for infection. If infection is suspected, request order for obtaining wound cultures, tissue biopsies, or radiologic examination. If applicable, apply/administer prescribed antibiotics^(2, 3, 5)
 - Assess frequently for pain; if present, administer prescribed analgesics
 - Monitor effectiveness of prevention and treatment interventions

Coding Matrix

References are listed in order of strength:
 M Published meta-analysis
 SR Published systematic or integrative literature review
 RCT Published research (randomized controlled trial)
 R Published research (retrospective/controlled trial)
 C Case histories, case studies
 G Published guidelines
 RV Published review of the literature
 RU Published research (literature report)
 Q Published quality improvement report
 L Legislation
 PBR Published government report
 PPR Published procedure report
 PP Policies, procedures, protocols

References

- Agency for Healthcare Research and Quality (2008). Number of patients with pressure ulcers increasing. Retrieved April 7, 2009, from <http://www.evidencebasedcare.org/0000021508.htm> (RU)
- American Medical Directors Association. (2008). Pressure ulcers in the long-term setting. National Guidelines Clearinghouse. Retrieved April 7, 2009, from <http://www.guideline.gov/content.aspx?id=12811&linkid=502673&linkid=502673> (G)
- Blott, R., Mackinlay, S., & Fox, V. (2008). Quality improvement program to reduce the prevalence of pressure ulcers in an intensive care unit. *American Journal of Critical Care*, 17(4), 325-337. (R)
- Magee, M. G., Gagliardi, A., Velga, D. F., Barnes, L., Galindo, V., Kelleys, H., et al. (2007). Risk factors for pressure ulcers in hospitalized elderly without significant cognitive impairment. *Wounds*, 19(1), 20-24. (R)
- Selton, R., & Popescu, A. (2008). Pressure ulcers and wound care. *Medicine for the MCO*. Retrieved April 7, 2009, from <http://www.evidencebasedcare.org/0000021508.htm> (R)
- Wound, Ostomy, and Continence Nurses Society. (2003). Guideline: Prevention and management of pressure ulcers. National Guidelines Clearinghouse. Retrieved April 7, 2009, from <http://www.guideline.gov/content.aspx?id=502673&linkid=502673> (R)

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Red Flags

- **Respiratory distress during medication administration through the NG tube may indicate migration of tube into the bronchial tree. Symptoms of this problem include cyanosis, decreased oxygen saturation by pulse oximetry, vomiting, increasing restlessness, stridor, and wheezing. If these symptoms occur, stop use immediately, and retract or remove the tube. Alert the clinician immediately and, if needed, initiate oxygen therapy and other emergency measures**
- **Sustained-release drugs must not be administered by NG tube. The crushing that is necessary in order for the pill to pass through the tube causes the rapid release of a high dose of medication into the patient's stomach, making overdose likely to occur. Contact the clinician for an adjustment to the order if sustained-release medications are prescribed for NG administration**
- **If you note resistance when attempting to flush the tube, it may have become blocked by the precipitation of medication. Attempt to clear the tube with gentle suction by pulling back on the plunger of the syringe, then pressing on the plunger to create a moderate amount of positive pressure within the tube. If this intervention does not clear the obstruction, remove and replace the NG tube. Never use force to infuse solution into the NG tube as this may create excessive pressure within the stomach, causing regurgitation of stomach contents and possible aspiration**

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[Prevention](#)

(Surgical Wound Dehiscence; Operative Wound Dehiscence)

by: Catherine Duffek, MLS, MS

Definition

Wound dehiscence is the parting of the layers of a surgical wound. Either the surface layers separate or the whole wound splits open. This is a serious condition and requires care from your doctor.

Causes

Wound dehiscence varies depending on the kind of surgery you have. The following is a list of generalized causes:

- Infection at the wound
- Pressure on sutures
- Sutures too tight

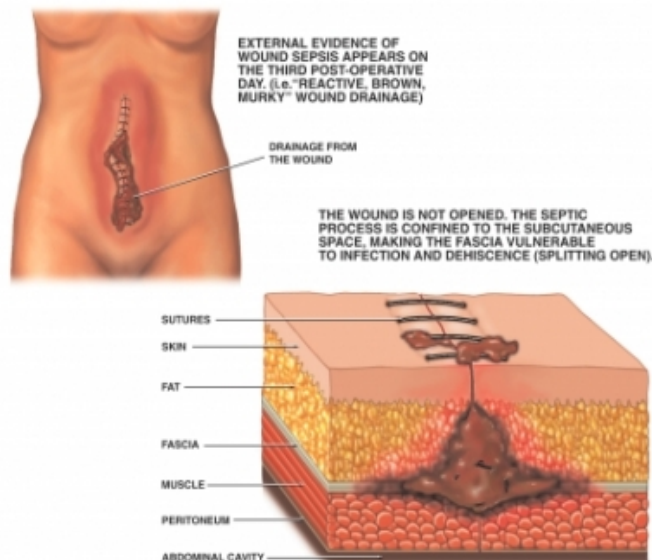
- Injury to the wound area
- Weak tissue or muscle at the wound area
- Incorrect suture technique used to close operative area
- Poor closure technique at the time of surgery
- Use of high-dose or long-term corticosteroids
- Severe vitamin C deficiency ([scurvy](#))

Related Information

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Patient Education

Wound Infection



Search for Evidence Guidelines Resources

- National Guideline Clearinghouse
guideline.gov
- PubMed/MEDLINE
- CINAHL/CINAHL Plus



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pressure ulcers

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| <input type="checkbox"/> Pressure ulcer prevention and treatment following spinal cord injury , Consortium for Spinal Cord Medicine - Private Nonprofit Organization
Paralyzed Veterans of America - Private Nonprofit Organization. 2000 Aug (reviewed 2005). 80 pages. NGC:001815
Other Guidelines from this Developer |
| <input type="checkbox"/> Risk assessment & prevention of pressure ulcers , Registered Nurses' Association of Ontario - Professional Association. 2002 Jan (revised 2005 Mar). 80 pages. NGC:004215
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| <input type="checkbox"/> Assessment and management of stage I to IV pressure ulcers , Registered Nurses' Association of Ontario - Professional Association. 2002 Aug (revised 2007 Mar). 112 pages. NGC:005793
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Other Guidelines from this Developer |
| <input type="checkbox"/> Pressure ulcer treatment. Health care protocol , Institute for Clinical Systems Improvement - Private Nonprofit Organization. 2008 Jan. 28 pages. NGC:007032
Other Guidelines from this Developer |



Guideline Summary

Brief Summary

GUIDELINE TITLE

Pressure ulcer treatment. Health care protocol.

BIBLIOGRAPHIC SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). **Pressure** ulcer treatment. Health care protocol. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2008 Jan. 28 p. [36 references]

GUIDELINE STATUS

This is the current release of the guideline.

BRIEF SUMMARY CONTENT

[RECOMMENDATIONS](#)

[EVIDENCE SUPPORTING THE RECOMMENDATIONS](#)

[IDENTIFYING INFORMATION AND AVAILABILITY](#)

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RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Note from the National Guideline Clearinghouse (NGC) and the Institute for Clinical Systems Improvement (ICSI): For a description of what has changed since the previous version of this protocol, refer to [Summary of Changes Report- January 2008](#).

The recommendations for treatment of **pressure ulcers** are presented in the form of a protocol accompanied by 7 detailed annotations. Clinical highlights and the annotations follow.

Class of evidence (A-D, M, R, X) definitions are provided at the end of the "Major Recommendations" field.

Clinical Highlights

- The treatment of **pressure ulcers** should include an assessment specific to the wound, including the following elements: history and physical, etiology, psychosocial needs, nutritional status, wound assessment and documentation of these elements. (*Annotation #1*)
- The treatment of **pressure ulcers** should be consistent and evidence based. (*Annotation #2*)
- Education should be provided to the patient, family, caregivers and health care team members regarding treatment of **pressure ulcers**. (*Annotation #6*)

Special Considerations

Persons undergoing palliative or hospice care may need an alteration in their goals of care. The goals of care can shift from prevention and treatment to palliation and management of ulcer pain and odor [R].

Annotations for **Pressure** Ulcer Treatment

1. Wound Assessment

Key Points:

- The assessment for **pressure** ulcer treatment should focus on the wound and following elements: history and physical, etiology, psychosocial needs,

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Guideline Comparison

GUIDELINE TITLE	Assessment and management of stage I to IV pressure ulcers.	Pressure ulcer treatment. Health care protocol.
DATE RELEASED	2002 Aug (revised 2007 Mar)	2008 Jan
ADAPTATION:	Not applicable: The guideline was not adapted from another source.	Not applicable: Guideline was not adapted from another source.
LENGTH:	37 pages	13 pages
GUIDELINE DEVELOPER	Registered Nurses' Association of Ontario - Professional Association	Institute for Clinical Systems Improvement - Private Nonprofit Organization
SOURCE(S) OF FUNDING	Funding was provided by the Ontario Ministry of Health and Long Term Care.	The following Minnesota health plans provide direct financial support: Blue Cross and Blue Shield of Minnesota.
RATING SCHEME:	The validity of scientific findings was judged by design, sample selection and size, inclusion of comparison groups, generalizability, and agreement with other studies.	Not applicable
METHODS TO ANALYZE EVIDENCE:	Review	Systematic Review with Evidence Tables
VIEW MAJOR RECOMMENDATIONS:	View Major Recommendations	View Major Recommendations
AVAILABILITY OF FULL TEXT:	View Availability Information 53	View Full-text Guideline

Searching for Practice Guidelines in CINAHL and MEDLINE/PubMed

- In CINAHL: Limit to **Practice Guidelines** as a Publication Type
- In MEDLINE/PubMed: Limit to **Practice Guideline** under Type of Article

Special Meta-Search Engines that find evidence sites

TRIP

tripdatabase.com



SUMSearch

sumsearch.uthscsa.edu



TRIP Database

tripdatabase.com

- Meta-search engine
- Performs a simple search of more than 75 databases
- Finds evidence-based resources
- Searches *Cochrane, National Guideline Clearinghouse, Bandolier, etc.*

TRIP search: prevention of pressure ulcers



pressure ulcers prevention

Search

Advanced Search Search Tips

pressure sores

pressure sore

Below are links to articles providing background knowledge relating to *pressure sores*

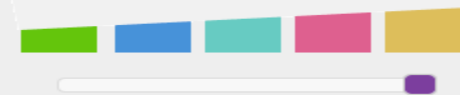
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2. [Alternating pressure air mattresses as prevention for pressure ulcers: a literature review](#)
 DARE, 2008
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3. [Best Practice Statement - prevention and management of pressure ulcers](#)
 NHS Quality Improvement Scotland 2009
[Use as CPD](#) [Preview](#) [Conclusion](#)
4. [Skin safety protocol: risk assessment and prevention of pressure ulcers. Health care protocol.](#)
 Institute for Clinical Systems Improvement 2007
[Use as CPD](#) [Preview](#) [Conclusion](#)
5. [Support surfaces for treating pressure ulcers](#)
 Cochrane Database of Systematic Reviews 2008
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Search for **PRESSURE ULCERS**
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New [Online EBP calculator](#)

For broad discussions that are easy to read, but not as up-to-date

Texts



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<small>PubMed-FullText did not complete a response within time, consider searching PubMed-FullText directly or searching later.</small>	

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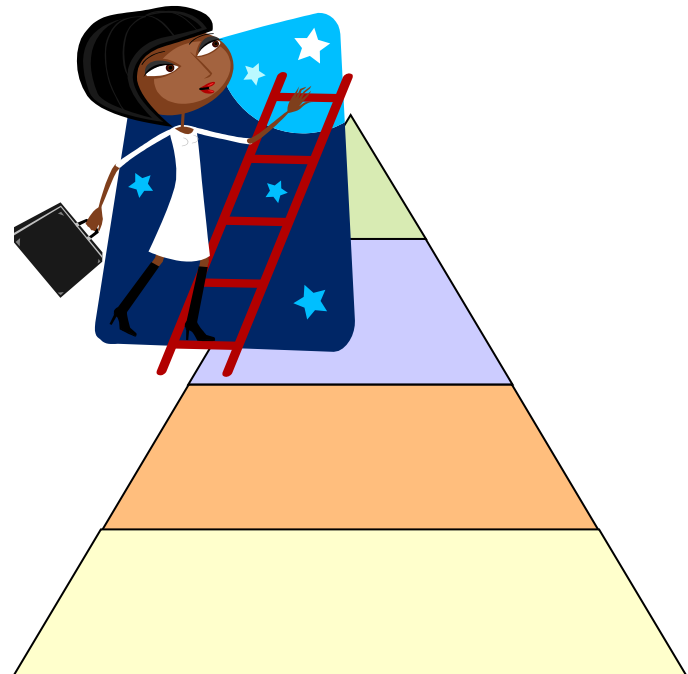
For more up-to-date answers to specific questions, but are harder to read

Systematic reviews (*what is so good about systematic reviews?*)

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 PubMed (possible systematic reviews)	284 documents.
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Systematic Review/Meta-Analyses Resources

- Cochrane Database of Systematic Reviews (CDSR)
- PubMed/MEDLINE Systematic Reviews
- CINAHL/CINAHL Plus



Systematic Reviews vs Meta-Analyses

A ***Systematic review***: is a literature review focused on a single question which tries to identify, appraise, select and synthesize all high quality research evidence relevant to that question.

Meta-analyses: are systematic reviews that combine the results of several studies using quantitative statistics.

Cochrane Database of Systematic Reviews

- Widely regarded as the “gold standard” of evidence-based information
- Extensive systematic reviews and complex synthesis
- Very focused, specific questions



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pressure ulcers beds

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[Review] Support surfaces for pressure ulcer prevention

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- [Methods of the review](#)
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[Review] Support surfaces for pressure ulcer prevention

N Cullum, E McInnes, SEM Bell-Syer, R Legood

Cochrane Database of Systematic Reviews 2007 Issue 1

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DOI: 10.1002/14651858.CD001735.pub2 This version first published online: 19 July 2004 in Issue 3, 2004

Date of Most Recent Substantive Amendment: 20 May 2004

This record should be cited as: Cullum N, McInnes E, Bell-Syer SEM, Legood R. Support surfaces for pressure ulcer prevention. *Cochrane Database of Systematic Reviews*. 2004; Issue 3: CD001735. DOI: 10.1002/14651858.CD001735.pub2.

Abstract

Background

Pressure ulcers (also known as bedsores, pressure sores, decubitus ulcers) are areas of localised damage to the skin and underlying tissue caused by prolonged pressure and friction. They are common in the elderly and immobile and costly in financial and human terms. Pressure-relieving beds, mattresses and overlays are used to prevent pressure ulcers. This review aims to assess the effectiveness of pressure-relieving beds, mattresses and overlays in preventing pressure ulcers in both institutional and non-institutional settings.

Objectives

This systematic review seeks to answer the following questions:

- to what extent do pressure-relieving cushions, beds, mattress overlays and mattress replacements reduce the incidence of pressure ulcers in institutional settings?
- how effective are different pressure-relieving surfaces in preventing pressure ulcers, compared to one another?

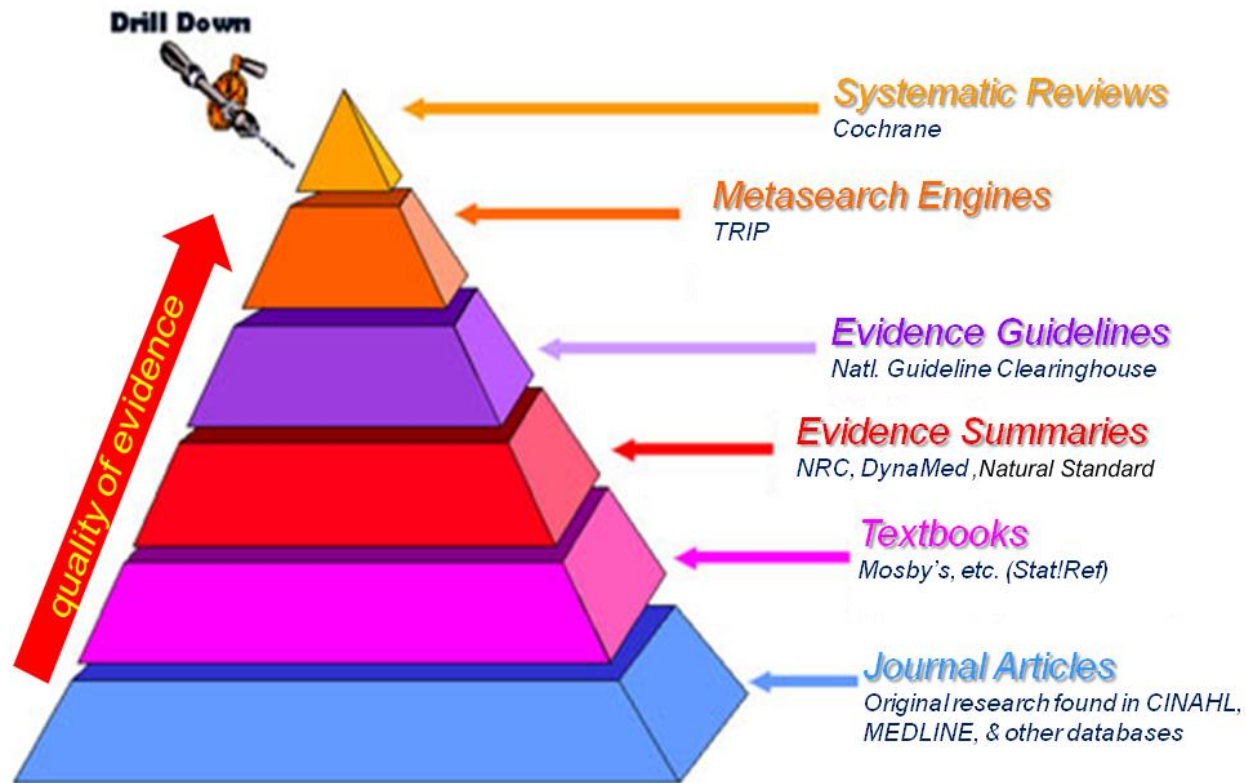
Search strategy

The Specialised Trials Register of the Cochrane Wounds Group (compiled from regular searches of many electronic databases including

Finding Systematic Reviews and Meta-Analyses in *PubMed/MEDLINE and CINAHL*

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 - Search for Meta Analysis as a
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Searching for Evidence Categories



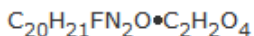
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- AHFS Drug Information [on HEAL-WA]
- Davis's Drug Guide for Nurses [on HEAL-WA]
- Natural Standard [on HEAL-WA]
 - Evidence-based information on CAM, including supplements, herbs, acupuncture, massage, etc.
 - Also available partially through *MedlinePlus*
www.nlm.nih.gov/medlineplus/druginformation.html
- Natural Medicines Comprehensive Database
www.naturaldatabase.com

AHFS Drug Information [on HEAL-WA]

Escitalopram Oxalate

Introduction



• Escitalopram, the S-enantiomer of citalopram, is a selective serotonin-reuptake inhibitor (SSRI) and an antidepressant.¹

Uses

• Major Depressive Disorder

Escitalopram oxalate is used in the treatment of major depressive disorder.¹ Efficacy for the management of major depression was established in 3 placebo-controlled studies of 8 weeks' duration in adult outpatients who met DSM-IV criteria for major depressive disorder.^{1, 2} In these studies, 10- and 20-mg daily dosages of escitalopram were more effective than placebo in improving scores on Montgomery Asberg Depression Rating Scale (MADRS), the Hamilton Rating Scale for Depression (HAM-D), and the Clinical Global Impression Improvement and Severity of Illness Scale.^{1, 2, 14} Escitalopram also was more effective than placebo in improving other aspects of depressive disorder, including anxiety, social functioning, and overall quality of life.² Substantial improvement in MADRS and HAM-D scores was noted in patients receiving either dosage of escitalopram compared with those receiving placebo after 1-2 weeks of therapy.^{2, 14, 16} In addition, escitalopram dosages of 10-20 mg daily appeared to be at least as effective as racemic citalopram of 20-40 mg daily.^{4, 16} There is some evidence that escitalopram may offer some clinical advantages compared with citalopram or other selective serotonin-reuptake inhibitors (e.g., increased efficacy, more rapid onset of therapeutic effect, fewer adverse effects); however, additional studies are needed to confirm these initial findings.^{8, 9, 10} Efficacy of escitalopram in hospital settings has not been established to date.^{1, 8} For further information on use of SSRIs in the treatment of major depressive disorder and considerations in choosing the most appropriate antidepressant agent for a particular patient, [see Uses: Major Depressive Disorder, in Citalopram Hydrobromide 28:16.04.20.](#)

Names

Lexapro[®]

Lexapro[®]

Lexapro[®] (scored)

Lexapro[®] (scored)

Lexapro[®] (scored)

Lexapro 5MG/5ML Solution (FOREST): 240/\$140.86 or 720/\$416.52

Lexapro 5MG Tablets (FOR

References

1. Forest Pharmaceuticals, Inc. Lexapro[®] (escitalopram oxalate) tablets/oral solution prescribing information. 2011.
2. Burke WJ, Gergel I, Bose A. Fixed-dose trial of the single isomer SSRI escitalopram in depressed outpatients. *Journal of Clinical Psychopharmacology*. 2003;23(6):331-6. [IDIS 479908] [\[PubMed 1200207\]](#)
3. Anon. Forest Lexapro[®] approval includes label claim of greater potency than celexa. FDC Rep. Aug 2002;33(8):1666.

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Scientific Gold Standard for Evidence-Based, Clinical Information on Natural Medicines

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Also Known As:

Alholva, Bird's Foot, Bockshornklee, Bockshornsame, Chandrika, Egypt Fenugreek, Foenugraeci Semen, Foenugreek, Greek Clover, Greek Hay, Greek Hay Seed, Hu Lu Ba, Methi, Methika, Medhika, Trigonella.

Scientific Name:

Trigonella foenum-graecum; Trigonella foenugraecum.
Family: Fabaceae/Leguminosae.

People Use This For:

Orally, fenugreek is used for lowering blood glucose in people with diabetes, loss of appetite, dyspepsia, gastritis, constipation, atherosclerosis, high serum cholesterol and triglycerides, and for promoting lactation.

fenugreek, guar gum, Fatax ginseng, and Siberian ginseng.

Interactions with Drugs:

ANTICOAGULANT/ANTIPLATELET DRUGS <<interacts with>> FENUGREEK

Interaction Rating = **Moderate** Be cautious with this combination

(622,12534). With large
ing nasal congestion,
paste of fenugreek
welling, and wheezing
e neonate to have an
ear to cause long-term
Loss of

that have constituents
some people
ed clover, turmeric,
e effects with herbs that
e devil's claw,

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Natural Standard was founded by clinicians and researchers to provide high quality, evidence-based information about complementary and alternative therapies. This international multidisciplinary collaboration now includes contributors from more than 100 eminent academic institutions.

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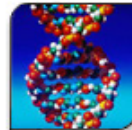
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For each therapy covered by Natural Standard and expert opinions. Validated rating scales and information is incorporated into comprehensive decision making. All monographs undergo Natural Standard databases.

Aloe

PROFESSIONAL MONOGRAPH

A comprehensive evidence-based systematic review of scientific literature, peer reviewed by Natural Standard editorial contributors. Provides in-depth coverage of efficacy, adverse effects, interactions, pregnancy/lactation, pharmacology/toxicology, laboratory tests, and quality of evidence. Includes evidence table and discussion(s), statistical analysis, and quality of evidence monographs by health care professionals.

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NATURAL STANDARD/HARVARD MEDICAL SCHOOL MONOGRAPH

These evidence-based monographs are written in collaboration between Natural Standard and the faculty of Harvard Medical School. These include data on efficacy, safety, interactions, and dosing, with pertinent references provided.

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NEWS ITEMS

Professional reading level

12th grade reading level

Patient handout 5th grade

Scientific Evidence for Common/Studied Uses:

Indication	Evidence Grade
Constipation (laxative)	B
Genital herpes	B
Psoriasis vulgaris	B
Seborrheic dermatitis	B
Aphthous stomatitis	C
Cancer prevention	C
Diabetes (type 2)	C
Dry skin	C
HIV infection	C
Lichen planus	C
Skin burns	C
Skin ulcers	C
Ulcerative colitis (including inflammatory bowel disease)	C
Wound healing	C
Mucositis	C
Pressure ulcers	C

Natural Standard

Aloe



Level of Evidence Grade	Criteria
A (Strong Scientific Evidence)	Statistically significant evidence of benefit from >2 properly randomized trials (RCTs), OR evidence from one properly conducted RCT AND one properly conducted meta-analysis, OR evidence from multiple RCTs with a clear majority of the properly conducted trials showing statistically significant evidence of benefit AND with supporting evidence in basic science, animal studies, or theory.
B (Good Scientific Evidence)	Statistically significant evidence of benefit from 1-2 properly randomized trials, OR evidence of benefit from ≥1 properly conducted meta-analysis OR evidence of benefit from >1 cohort/case-control/non-randomized trials AND with supporting evidence in basic science, animal studies, or theory. <i>This grade applies to situations in which a well designed randomized controlled trial reports negative results but stands in contrast to the positive efficacy results of multiple other less well designed trials or a well designed meta-analysis, while awaiting confirmatory evidence from an additional well designed randomized controlled trial.</i>
C (Unclear or conflicting scientific evidence)	Evidence of benefit from ≥1 small RCT(s) without adequate size, power, statistical significance, or quality of design by objective criteria,* OR conflicting evidence from multiple RCTs without a clear majority of the properly conducted trials showing evidence of benefit or ineffectiveness, OR evidence of benefit from ≥1 cohort/case-control/non-randomized trials AND without supporting evidence in basic science, animal studies, or theory, OR evidence of efficacy only from basic science, animal studies, or theory.
D (Fair Negative Scientific Evidence)	Statistically significant negative evidence (i.e., lack of evidence of benefit) from cohort/case-control/non-randomized trials, AND evidence in basic science, animal

Wound healing and related conditions

levels of scientific evidence for specific therapies

Natural Standard does not recommend specific therapies or practitioners.

Grade: C (Unclear or Conflicting Scientific Evidence)

Therapy	Specific therapeutic Use(s)
Aloe	Skin ulcers
Aloe	Wound healing
Alpha-lipoic acid	Wound healing (in patients undergoing hyperbaric oxygen therapy)
Arginine	Anal fissures
Arginine	Wound healing
Aromatherapy	Wound care
Ayurveda	Anal fissure
Bovine cartilage	Skin care (laser resurfacing adjunct)
Calendula	Wound healing
Chamomile	Wound healing
Chitosan	Wound healing
DMSO	Diabetic ulcers
DMSO	Extravasation
DMSO	Surgical skin flap ischemia

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www.nlm.nih.gov/medlineplus/druginformation.html

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Drug Information

Adapted from *Natural Standard*

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Information on thousands of prescription and over-the-counter medications is provided through two drug resources

- MedMaster™[†], a product of the [American Society of Health-System Pharmacists \(ASHP\)](#)
- USP DI® Advice for the Patient®[‡], a product of the [United States Pharmacopeia \(USP\)](#).

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Natural Standard is an international research collaboration that aggregates and synthesizes data on complementary and alternative therapies.

- Using a comprehensive methodology and reproducible grading scales, information is created that is evidence-based, consensus-based, and peer-reviewed
- Tapping into the collective expertise of a multidisciplinary Editorial Board.

For additional herb and supplement information, see the MedlinePlus [herbal medicine](#) topic page.

105 Herbs and Supplements Monographs in English & Spanish

Peppermint oil

Peppermint oil (*Mentha x piperita* L.)

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While some complementary and alternative techniques have been studied scientifically, high-quality data regarding safety, effectiveness, and mechanism of action are limited or controversial for most therapies. Whenever possible, it is recommended that practitioners be licensed by a recognized professional organization that adheres to clearly published standards. In addition, before starting a new technique or engaging a practitioner, it is recommended that patients speak with their primary healthcare provider(s). Potential benefits, risks (including financial costs), and alternatives should be carefully considered. The below monograph is designed to provide historical background and an overview of clinically-oriented research, and neither advocates for or against the use of a particular therapy.

Related Terms:

- Balm mint, black peppermint, brandy mint, curled mint, Feullis de menthe, Japanese peppermint, Katzenkraut (German), lamb mint, *Mentha arvensis* L. var *piperascens*, menta prima (Italian), *Menthae piperitae aetheroleum* (peppermint oil), *Menthae piperita* var *officinalis*, *Menthae piperitae folium* (peppermint leaf), *Menthe anglaise*, *Menthe poivre*, *Menthe poivre*, *Mentha piperita* var *vulgaris*, Our Lady's mint, pebermynte (Danish), Pfefferminz (German), Porminzen, Schmecker, spearmint (*Mentha spicata* L.), water mint (*Mentha aquatica*), white peppermint, WS(R) 1340.
- **Essential oil constituents:** Cineol, isomenthone, liminene, menthofuran, menthol, menthone, menthyl acetate, terpenoids.
- **Leaf constituents:** Caffeic acid, chlorogenic acid, luteolin, hesperidin, rutin, "volatile" oil.
- **Selected brand names:** Ben-Gay®, Colpermin®, China Maze, Cholaktol, Citaethol, Enteroplant® (contains peppermint and caraway oil), Kiminto, Mentacur, Mentholatum, Mintec, Rhuli Gel®, Robitussin® cough drops, SX Mentha®, Vicks VapoRub®.
- **Combination products:** Absorbine Jr.®, Iberogast®, Listerine®.

Aceite de menta (*menta piperita*)

Natural Standard Bottom Line Monograph, Copyright © 2005 (www.naturalstandard.com).
Se prohíbe su distribución comercial. Esta monografía tiene la intención de servir para fines informativos únicamente, por lo cual no se debe interpretar como un consejo médico específico. Usted deberá consultar con un proveedor médico calificado antes de tomar decisiones respecto a terapias y/o afecciones de salud.



No obstante se han estudiado de forma científica ciertas técnicas complementarias y alternas, para la mayoría de las terapias hay limitación o controversia sobre los datos de alta calidad respecto a la seguridad, eficacia y mecanismo de acción. Se recomienda, al máximo posible, que los practicantes cuenten con licencias expedidas por una organización profesional reconocida que se adhiera a normas claramente publicadas. Además, antes de iniciar una nueva técnica o contratar a un practicante, se recomienda que los pacientes consulten con su(s) proveedor(es) médico(s) principal(es). Se deben considerar atentamente los beneficios y riesgos potenciales (incluye los costos financieros) así como las alternativas. La siguiente monografía está diseñada para ofrecer una historia y un resumen de la investigación con orientación clínica, y la misma ni defiende ni se opone al uso de una terapia en particular.

Términos relacionados:

- Bálsamo de menta, menta negra, menta de brandy, menta crespá, Feullis de menthe, menta japonesa, Katzenkraut (alemán), menta de cordero, menta arvenis, L. var *piperascens*, menta prima (italiano), *Menthae piperitae aetheroleum* (aceite de menta) *Menthae piperita* var *officinalis*, *Menthae piperitae folium* (hoja de menta), *Menthe anglaise*, *Menthe poivre*, *Mentha piperita* var *vulgaris*, Our Lady's mint, pebermynte (danés), Pfefferminz (alemán), Porminzen, Schmecker, hierbabuena (*Mentha spicata*), menta acuática (*Mentha aquatica*), menta blanca, WS (R) 1340.
- **Elementos constituyentes esenciales del aceite :** Cineol, isomentona, limoneno, mentofurano, mentol, mentona, acetato de mentilo, terpenoides.
- **Elementos constituyentes de la hoja :** Ácido cafeico, ácido clorogénico, luteolina, hesperidina, rutin, aceite "volátil".
- **Selección de marcas registradas :** BenGay®, Colpermin®, China Maze, Cholaktol, Citaethol, Enteroplant® (contiene aceite de menta y alcaravea), Kiminto, Mentacur, Mentholatum, Mintec, Rhuli Gel®, Robitussin® cough drops (pastillas para la tos), SX Mentha®, Vicks VapoRub®.

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Approx 15-20 new stories added per day

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Announcement listservs:

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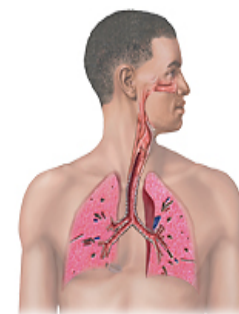
The screenshot shows the MedlinePlus website with a search bar and several content sections. A red circle highlights the 'español' link in the top right navigation area. The 'Health Topics' section lists various categories like Drug Information, Medical Encyclopedia, and Dictionary. The 'Current Health News' section features articles such as 'Mouthguards Essential for Back-to-School Sports'. The 'Featured Site' section highlights Hurricane Katrina links. The 'In the Spotlight' section mentions Prostate Cancer Awareness Month. The 'Interactive Tutorials' section lists over 165 tutorials. The 'ClinicalTrials.gov' section promotes studies for new drugs. The 'NIH SeniorHealth' section provides information for older adults. The 'Surgery Videos' section offers videos of surgical procedures. The footer contains copyright information and a page update date of 07 September 2005.

Also called: CF

Cystic fibrosis (CF) is an inherited disease of the mucus and sweat glands. It affects mostly your lungs, pancreas, liver, intestines, sinuses and sex organs. CF causes your mucus to be thick and sticky. The mucus clogs the lungs, causing breathing problems and making it easy for bacteria to grow. This can lead to problems such as repeated lung infections and lung damage.

The symptoms and severity of CF vary widely. Some people have serious problems from birth. Others have a milder version of the disease that doesn't show up until they are teens or young adults.

Although there is no cure for CF, treatments have improved greatly in recent years. Until the 1980s, most deaths from CF occurred in children and teenagers. Today, with improved treatments, people with CF live, on average, to be more than 35 years old.



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National Heart, Lung, and Blood Institute

Start Here

- [Cystic Fibrosis NIH](#) (National Heart, Lung, and Blood Institute)
- [Cystic Fibrosis Interactive Tutorial](#) (Patient Education Institute) - Requires Flash Player
Also available in [Spanish](#)
- [Genetics Home Reference: Cystic fibrosis NIH](#) (National Library of Medicine)

Basics <ul style="list-style-type: none"> • Overviews • Latest News • Diagnosis/Symptoms • Treatment • Prevention/Screening 	Learn More <ul style="list-style-type: none"> • Nutrition • Disease Management • Related Issues 	Multimedia & Cool Tools <ul style="list-style-type: none"> • Tutorials
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Go Local

Services and providers for **Cystic Fibrosis** in the U.S.

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National Institutes of Health

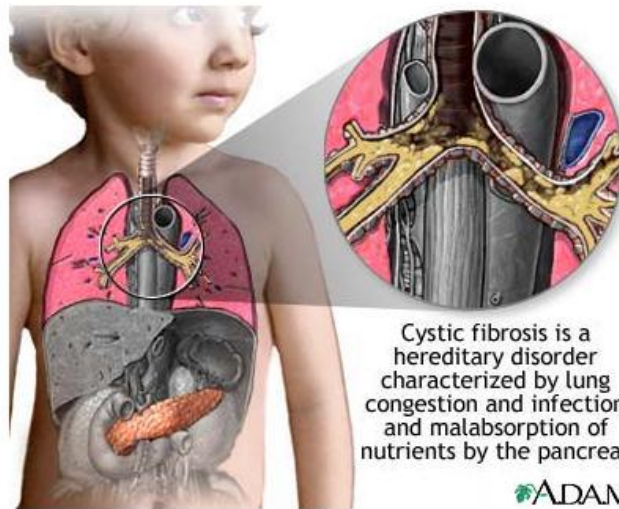
The primary NIH organization for research on *Cystic Fibrosis* is the [National Heart, Lung, and Blood Institute](#)

Overviews

- [Cystic Fibrosis](#) (March of Dimes Birth Defects Foundation)
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- [Cystic Fibrosis](#) (Mayo Foundation for Medical Education and Research)



Cystic fibrosis



Cystic fibrosis is a hereditary disorder characterized by lung congestion and infection and malabsorption of nutrients by the pancreas

ADAM

Cystic fibrosis is the most common cause of chronic lung disease in children and young adults, and the most common fatal hereditary disorder affecting Caucasians in the US.

Update Date: 5/11/2009

Updated by: Daniel Rauch, MD, FAAP, Director, Pediatric Hospitalist Program, Associate Professor of Pediatrics, NYU School of Medicine, New York, NY. Review provided by VeriMed Healthcare Network. Also reviewed by David Zieve, MD, MHA, Medical Director, A.D.A.M., Inc.

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Management of severe sepsis and septic shock in adults

TOPIC OUTLINE

- INTRODUCTION
- THERAPEUTIC PRIORITIES
- EARLY MANAGEMENT
 - Stabilize respiration
 - Assess perfusion
 - Catheters
 - Restore perfusion
 - Intravenous fluids
 - Vasopressors
 - Additional therapies
 - Ongoing management
- CONTROL OF THE SEPTIC FOCUS
 - Identification of the septic focus
 - Eradication of infection
 - Antimicrobial regimen
- ADDITIONAL THERAPIES
 - Recombinant human activated protein C
 - Less severe disease
 - Children
 - SIRS
 - VTE prophylaxis during infusion
 - Glucocorticoids
 - Nutrition
 - Intensive insulin therapy
 - Protocols
- SUMMARY AND RECOMMENDATIONS

Management of severe sepsis and septic shock in adults

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Last literature review version 17.3: September 2009 | **This topic last updated:** October 16, 2009 [\(More\)](#)

INTRODUCTION — Sepsis is a clinical syndrome characterized by systemic inflammation due to infection. There is a continuum of severity ranging from sepsis to severe sepsis and septic shock. Over 750,000 cases of sepsis occur in the United States each year, resulting in approximately 200,000 fatalities [1]. Even with optimal treatment, mortality due to severe sepsis or septic shock is approximately 40 percent and can exceed 50 percent in the sickest patients [2-5].

Numerous interventions exist that decrease mortality due to sepsis. In this topic review, the management of severe sepsis and septic shock is discussed. Definitions, diagnosis, pathophysiology, and investigational therapies are reviewed separately. (See "[Sepsis and the systemic inflammatory response syndrome: Definitions, epidemiology, and prognosis](#)" and "[Pathophysiology of sepsis](#)" and "[Investigational and ineffective therapies for sepsis](#)".)

THERAPEUTIC PRIORITIES — Therapeutic priorities for patients with severe sepsis or septic shock include:

- Early initiation of supportive care to correct physiologic abnormalities, such as hypoxemia and hypotension [6-9].
- Distinguishing sepsis from systemic inflammatory response syndrome (SIRS) (table 1 and table 2) because, if an infection exists, it must be identified and treated as soon as possible (table 3). This may require a surgical procedure (eg, drainage), as well as appropriate antibiotics.

EARLY MANAGEMENT — The first priority in any patient with severe sepsis or septic shock is stabilization of their airway and breathing. Next, perfusion to the peripheral tissues should be restored [7,10].

Stabilize respiration — Supplemental oxygen should be supplied to all patients with sepsis and oxygenation should be monitored continuously with pulse oximetry. Intubation and mechanical ventilation may be required to support the increased work of breathing that typically accompanies sepsis, or for airway protection since encephalopathy and a depressed level of consciousness frequently complicate sepsis [11,12].

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... content also are available and have been studied in clinical trials in venous insufficiency and **wound healing** at doses of 30 to 90 mg/day
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... abuse, cancer), as well as the use of several drugs, including corticosteroids. SEE: illus: **WOUND HEALING**. ¶ **COMPLICATIONS:** These may result from the formation of a scar that interferes with the ...
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... sangre de drago, drago ¶ **CLINICAL OVERVIEW** ¶ Uses: Dragon's blood has been used for its antiviral, **wound healing**, and GI benefits. ¶ Dosing: The standardized dragon's blood product SP-303 (Provir) has been studied ...
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Results.: Cumulative incidence of **pressure ulcers** grade 2-4 was 20.1%. The following variables were positively associated with **pressure ulcers** grade 2-4: history of vascular disease, treatment with Dopamine @ or Dobutamine @ , ...

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Critically ill patients are at a particular risk for developing **pressure ulcers**.

Yet until now, no sufficiently specific, validated **pressure ulcer** risk assessment instruments exist for critically ill patients. In a prospective ...

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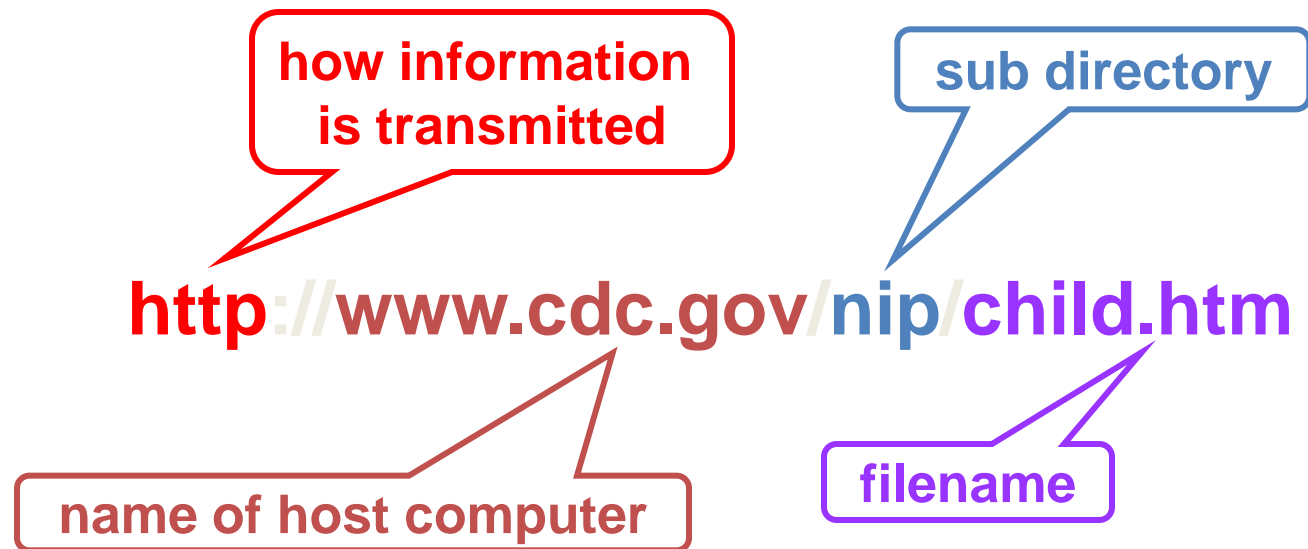
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