General

Guideline Title

Best evidence statement (BEST). Use of care giver education to prevent positional plagiocephaly.

Bibliographic Source(s)

Cincinnati Children's Hospital Medical Center. Best evidence statement (BEST). Use of care giver education to prevent positional plagiocephaly. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2012 Jun 6. 5 p. [9 references]

Guideline Status

This is the current release of the guideline.

Recommendations

Major Recommendations

The strength of the recommendation (strongly recommended, recommended, or no recommendation) and the quality of the evidence (1aśś 5b) are defined at the end of the "Major Recommendations" field.

It is recommended that care givers of infant(s) routinely receive education regarding "tummy time" and infant positioning beginning prior to two months of age to decrease the amount of time infants spend in positions other than supine and decrease the incidence of plagiocephaly (van Vlimmeren et al., 2008 [2a]; Wen et al., 2011 [2b]; Cavalier et al., 2011 [3a]; Lennartsson, 2011 [4b]; Jennings, Sarbaugh, & Payne, 2005 [4b]).

Definitions:

Table of Evidence Levels

<table>
<thead>
<tr>
<th>Quality Level</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a† or 1b†</td>
<td>Systematic review, meta-analysis, or meta-synthesis of multiple studies</td>
</tr>
<tr>
<td>2a or 2b</td>
<td>Best study design for domain</td>
</tr>
<tr>
<td>3a or 3b</td>
<td>Fair study design for domain</td>
</tr>
<tr>
<td>4a or 4b</td>
<td>Weak study design for domain</td>
</tr>
<tr>
<td>5a or 5b</td>
<td>General review, expert opinion, case report, consensus report, or guideline</td>
</tr>
<tr>
<td>5</td>
<td>Local Consensus</td>
</tr>
</tbody>
</table>
Table of Recommendation Strength

<table>
<thead>
<tr>
<th>Strength</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is strongly recommended that…</td>
<td>When the dimensions for judging the strength of the evidence are applied, there is high support that benefits clearly outweigh risks and burdens (or vice versa for negative recommendations)</td>
</tr>
<tr>
<td>It is strongly recommended that… not…</td>
<td>When the dimensions for judging the strength of the evidence are applied, there is moderate support that benefits are closely balanced with risks and burdens.</td>
</tr>
<tr>
<td>There is insufficient evidence and a lack of consensus to make a recommendation…</td>
<td></td>
</tr>
</tbody>
</table>

See the original guideline document for the dimensions used for judging the strength of the recommendation.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Positional plagiocephaly

Guideline Category

Prevention

Clinical Specialty

Family Practice

Pediatrics

Intended Users

Advanced Practice Nurses

Nurses

Physician Assistants

Physicians

Guideline Objective(s)

To evaluate, among infants less than two months of age, if infant positioning education given to their care givers versus no education increases the
amount of time the infant spends in positions other than supine and decreases the incidence of positional plagiocephaly

Target Population

Infants less than two months of age and premature infants with adjusted age less than two months

Note: Excluded are infants who have a medical condition where varying infant position may increase or cause health risk.

Interventions and Practices Considered

Routine education regarding "tummy time" and infant positioning for caregivers of infants

Major Outcomes Considered

Incidence of positional plagiocephaly

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Search Strategy

Key words: positional plagiocephaly; plagiocephaly; infant positioning; non-syndromic plagiocephaly; deformational plagiocephaly

Limits: English, infants, 2000 to 2011

Databases: CINAHL, PubMed

End date of retrieval: 12-30-11

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Table of Evidence Levels

<table>
<thead>
<tr>
<th>Quality Level</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a† or 1b†</td>
<td>Systematic review, meta-analysis, or meta-synthesis of multiple studies</td>
</tr>
<tr>
<td>2a or 2b</td>
<td>Best study design for domain</td>
</tr>
</tbody>
</table>
Quality Level | Definition | Methods Used to Analyze the Evidence
--- | --- | ---
4a or 4b | Fair study design for domain | Systematic Review
5a or 5b | General review, expert opinion, case report, consensus report, or guideline |
5 | Local Consensus

†a = good quality study; b = lesser quality study

Methods Used to Analyze the Evidence

Systematic Review

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Not stated

Rating Scheme for the Strength of the Recommendations

Table of Recommendation Strength

<table>
<thead>
<tr>
<th>Strength</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is strongly recommended that…</td>
<td>When the dimensions for judging the strength of the evidence are applied, there is high support that benefits clearly outweigh risks and burdens (or vice versa for negative recommendations)</td>
</tr>
<tr>
<td>It is strongly recommended that… not…</td>
<td></td>
</tr>
<tr>
<td>It is recommended that…</td>
<td>When the dimensions for judging the strength of the evidence are applied, there is moderate support that benefits are closely balanced with risks and burdens.</td>
</tr>
<tr>
<td>It is recommended that… not…</td>
<td></td>
</tr>
</tbody>
</table>

There is insufficient evidence and a lack of consensus to make a recommendation…

See the original guideline document for the dimensions used for judging the strength of the recommendation.

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Peer Review
Description of Method of Guideline Validation

This Best Evidence Statement has been reviewed against quality criteria by 2 independent reviewers from the Cincinnati Children's Hospital Medical Center (CCHMC) Evidence Collaboration.

Evidence Supporting the Recommendations

References Supporting the Recommendations


Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Early caregiver education regarding unlimited restriction of movement, infant positioning, and safe infant environment reduces the incidence of positional plagiocephaly (PP) and has a positive effect on reduction of diagnosed cases of PP during the first 12 months and infants less than 6 months of age.

Potential Harms

Not stated

Qualifying Statements

This Best Evidence Statement addresses only key points of care for the target population; it is not intended to be a comprehensive practice
guideline. These recommendations result from review of literature and practices current at the time of their formulation. This Best Evidence Statement does not preclude using care modalities proven efficacious in studies published subsequent to the current revision of this document. This document is not intended to impose standards of care preventing selective variances from the recommendations to meet the specific and unique requirements of individual patients. Adherence to this Statement is voluntary. The clinician in light of the individual circumstances presented by the patient must make the ultimate judgment regarding the priority of any specific procedure.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Audit Criteria/Indicators

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Staying Healthy

IOM Domain

Effectiveness

Identifying Information and Availability

Bibliographic Source(s)

Cincinnati Children's Hospital Medical Center. Best evidence statement (BEST). Use of care giver education to prevent positional plagiocephaly. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2012 Jun 6. 5 p. [9 references]

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2012 Jun 6
Guideline Developer(s)

Cincinnati Children's Hospital Medical Center - Hospital/Medical Center

Source(s) of Funding

Cincinnati Children's Hospital Medical Center

Guideline Committee

Not stated

Composition of Group That Authored the Guideline

Group/Team Members: Candyce L. Wilson, RN, BSN, Division of Outpatient Services; Mary Ellen Meier, RN, MSN, CPN, Center for Professional Excellence and Business Integration, Research and Evidence-Based Practice, EBP Mentor; Zienia Samaan, MD, FAAP, Medical Director Pediatric Primary Care Center & Hopple Street Health Center; Pamela Hudson, PT, MPH; Dawn Rothchild MSN, RN, Division of Plastic & Reconstructive Services; David A. Billmire MD, FAAP, Medical Director Division of Plastic Surgery

Financial Disclosures/Conflicts of Interest

No financial conflicts of interest were found.

Guideline Status

This is the current release of the guideline.

Guideline Availability

Electronic copies: Available from the Cincinnati Children's Hospital Medical Center Web site.

Print copies: For information regarding the full-text guideline, print copies, or evidence-based practice support services contact the Cincinnati Children's Hospital Medical Center Health James M. Anderson Center for Health Systems Excellence at EBDMInfo@cchmc.org.

Availability of Companion Documents

The following are available:

- Judging the strength of a recommendation. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2008 Jan. 1 p. Available from the Cincinnati Children's Hospital Medical Center Web site.
- Grading a body of evidence to answer a clinical question. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 1 p. Available from the Cincinnati Children's Hospital Medical Center Web site.
- Table of evidence levels. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2008 Feb 29. 1 p. Available from the Cincinnati Children's Hospital Medical Center Web site.

Print copies: For information regarding the full-text guideline, print copies, or evidence-based practice support services contact the Cincinnati Children's Hospital Medical Center Health James M. Anderson Center for Health Systems Excellence at EBDMInfo@cchmc.org.

In addition, suggested process or outcome measures are available in the original guideline document.
Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI Institute on August 30, 2012.

Copyright Statement

This NGC summary is based on the original full-text guideline, which is subject to the following copyright restrictions:

Copies of this Cincinnati Children's Hospital Medical Center (CCHMC) Best Evidence Statement (BEST) are available online and may be distributed by any organization for the global purpose of improving child health outcomes. Examples of approved uses of the BEST include the following:

- Copies may be provided to anyone involved in the organization's process for developing and implementing evidence based care.
- Hyperlinks to the CCHMC website may be placed on the organization's website.
- The BEST may be adopted or adapted for use within the organization, provided that CCHMC receives appropriate attribution on all written or electronic documents.
- Copies may be provided to patients and the clinicians who manage their care.

Notification of CCHMC at EBDMInfo@cchmc.org for any BEST adopted, adapted, implemented or hyperlinked by the organization is appreciated.

Disclaimer

NGC Disclaimer

The National Guideline Clearinghouse® (NGC) does not develop, produce, approve, or endorse the guidelines represented on this site.

All guidelines summarized by NGC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public or private organizations, other government agencies, health care organizations or plans, and similar entities.

Guidelines represented on the NGC Web site are submitted by guideline developers, and are screened solely to determine that they meet the NGC Inclusion Criteria.

NGC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or clinical efficacy or effectiveness of the clinical practice guidelines and related materials represented on this site. Moreover, the views and opinions of developers or authors of guidelines represented on this site do not necessarily state or reflect those of NGC, AHRQ, or its contractor ECRI Institute, and inclusion or hosting of guidelines in NGC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding guideline content are directed to contact the guideline developer.