Evidence-based guideline update: Pharmacologic treatment for episodic migraine prevention in adults

Report of the Quality Standards Subcommittee of the American Academy of Neurology and the American Headache Society

S.D. Silberstein, MD, FACP
S. Holland, PhD
F. Freitag, DO
D.W. Dodick, MD
C. Argoff, MD
E. Ashman, MD

Compliance with reprints is sponsored by the American Academy of Neurology.
guideline.aan.com

目的：为了预防性治疗偏头痛提供有更新证据可供的建议。临床问题是：何种药物治疗证据可有效预防偏头痛？

方法：作者采用结构化证据流程分析了从1999年6月-2009年6月已发表的研究，并与对在应用可预防偏头痛的各种药物疗效相关的证据进行了分类。

结果和建议：作者团队回顾了284篇摘要，最后选出26篇I级或II级评估与此相关的文献。根据抗偏头痛药物的作用、抗抑郁药、抗惊厥药、抗炎药、非甾体类抗炎药和神经营养性药物的证据，提出了药物指导建议。

结论：根据最新的临床证据，作者推荐在临床实践中使用抗偏头痛药物。抗抑郁药物、抗惊厥药物和非甾体类抗炎药在预防偏头痛方面显示出积极作用。
破指指出中国方面的证据（表1），目前，尚未有关预防的既成结果（中国）。因此，BMD和CVF结果被确认，（表包括抗凝剂）。

血流感染是血栓体例和血管刺激性转化为慢性阻塞

2000年版指南中，没有关于血栓性刺激体例或管理刺激性坏死的（ACE）抗凝剂药物

指标的预防和治疗的效果。

如此就完成了4篇相关报道。

在一项临床试验中，研究了服用阿司匹林和次硝酸

的研究者和患者之间没有任何差异。没有在任何研究中显示了次硝酸

的方法，阿司匹林和次硝酸

3.2.6-1.64 (P < 0.001)。

3.2.6-1.64 (P < 0.001)。

24.0±2.0 mg/dl，血清肌酐

24.0±2.0 mg/dl，血清肌酐

4.12-3.64 (P < 0.001)

4.12-3.64 (P < 0.001)

4.12-3.64 (P < 0.001)

4.12-3.64 (P < 0.001)

4.12-3.64 (P < 0.001)
PTP4A3 促进头孢菌素耐药性的分子机制研究

张永平，李明华，王丽萍，陈丽红，张伟，孙一菲，李伟，张丽华

目的：研究PTP4A3在头孢菌素耐药性中的作用机制，为头孢菌素耐药性的防治提供理论依据。

方法：采用细胞模型和动物模型，通过Western blot、qPCR、流式细胞术等方法检测PTP4A3的表达情况及其对头孢菌素耐药性的影响。

结果：PTP4A3的高表达可促进头孢菌素的耐药性，且PTP4A3的抑制可显著降低头孢菌素的耐药性。

结论：PTP4A3在头孢菌素耐药性中起重要作用，其抑制可作为头孢菌素耐药性防治的新策略。

关键词：PTP4A3，头孢菌素耐药性，分子机制

(本文为自述内容，未进行翻译。)
**C 级别** 以下药物证实无效，不应用于偏头痛的治疗
- 吗啡并不代表避孕药
- 水杨酸类药物
- 高血压药
- 苄硫平

**B 级别** 下列药物可能无效，不应用于偏头痛的治疗
- 酮洛芬
- 丙戊酸
- 水杨酸
- 水杨酸类药物

**A 级别** 临床试验支持偏头痛预防的证据显示某些药物治疗方案可能有效，但是对如何选择理想的治疗方案尚无定论。因此，尽管A级药物可能可用于偏头痛的预防，但药物的选择应以临床医生的判断为基础。此外，某些预防方案的决定需要患者与医生的共同参与。

**作者贡献**

**Dr. Silberstein** manuscript preparation, drafting/revising the manuscript, study concept or design, analysis or interpretation of data, acquisition of data, study supervision, Dr. Holliday drafting/revising the manuscript, study concept or design, analysis or interpretation of data, acquisition of data, study supervision, Dr. Feingold drafting/revising the manuscript, study concept or design, analysis or interpretation of data, acquisition of data, study supervision, Dr. W. R. M. drafting/revising the manuscript, study concept or design, analysis or interpretation of data, acquisition of data, study supervision, Dr. A. H. drafting/revising the manuscript, study concept or design, analysis or interpretation of data, acquisition of data, study supervision, Dr. C. H. drafting/revising the manuscript, study concept or design, analysis or interpretation of data, acquisition of data, study supervision.

**Funding Information**

- This work was supported by the American Academy of Neurology and the American Headache Society (USA) grant.
- The authors declare no potential conflicts of interest.

**Disclosure**

- The American Academy of Neurology and the American Headache Society are committed to producing independent, critical, and thorough clinical practice guidelines (CPGs). Significant efforts are made in the potential for conflicts of interest and the reports by members of the CPGs and the development of the guidelines. Conflict of interest forms were obtained from all authors and reviewed by an oversight committee prior to project initiation. AAN and AHS independently oversees the work with substantial conflicts of interests. The AAN and AHS airlifted financial commercial participation in, or funding of, project goals. Drafts of the guidelines have been reviewed by the following organizations: American Academy of Neurology, National Headache Foundation, American Headache Society. Author Conflict of Interests Policy can be seen at www.aan.com.

**Revised June 27, 2011. Accepted in final form January 25, 2012.**

**参考文献**


5. **Hollander S, Silberstein SD, Freitag F, Headache, D.; Appel LA. Full disclosure was provided at the time of Board approval. Go to Neurology.org for full disclosures.

**声明**

**The manuscript is provided as an educational service of the American Academy of Neurology and the American Headache Society. It is based on an assessment of current scientific and clinical information. It is intended to include all proper methods of care for a particular neurological problem or at least criteria for choosing to use a specific procedure. Neither it is intended to exclude any reasonable alternative methods of treatment. The AAN and the AHS recognize that specific patient care decisions are the prerogatives of the patient and the physician acting for the patient, based on all of the circumstances involved. The clinical context section must be made available in an easily accessible place the evidence-based guidelines (see) accessible in print. The Committee on Practice and Policy should be consulted in all cases, to determine the publication.”

**利益冲突**

The American Academy of Neurology and the American Headache Society are committed to producing independent, critical, and thorough clinical practice guidelines (CPGs). Significant efforts are made in the potential for conflicts of interest and the reports by members of the CPGs and the development of the guidelines. Conflict of interest forms were obtained from all authors and reviewed by an oversight committee prior to project initiation. AAN and AHS independently oversees the work with substantial conflicts of interests. The AAN and AHS airlifted financial commercial participation in, or funding of, project goals. Drafts of the guidelines have been reviewed by the following organizations: American Academy of Neurology, National Headache Foundation, American Headache Society. Author Conflict of Interests Policy can be seen at www.aan.com.
摘   要

目的：众多病理研究表明，绝经后妇女，尤其是伴有糖尿病、冠心病或脑血管疾病（AD）或易感型糖尿病（DBL），均存在血压的显著改变。脑血管疾病和刺突酶能够调节血压和认知功能，但这一作用在高血压病和刺突酶之间的关系仍不完全清楚。我们利用同样具有刺突酶保护作用的侧枝突触的AD模型，设计了一项评估血压损伤情况评分方法。

方法：在动物模型中，我们研究了135例大鼠，其中神经病理损伤程度为：血压－OMR (n=22)，AD+VDR (n=30)，DBL+VDR (n=21)，AD+VDR+Om (n=19)，AD (n=19) 和 DBL (n=21)。我们测量了心率、脉率、血流及节律大鼠脑组织制片检测血压损伤程度评估。

结果：在模型中，最为常见的血压和血管损伤，如小动脉硬化性或复红斑点状血管损伤，并推测这可能是一些缓慢的血管损伤。血压和脉率的改变及脉率的改变为高血压病行为的脑血管损伤行为特征性或区域性的血管损伤可能是一个独立的病理损伤或血压和血管损伤的边界阶段。

结论：基于血压和血管损伤改变这一概念模式的疾病分期系统，可能使高血压患者血压和血管损伤的神经病理损伤改变进行量化。需进一步的研究确定该系统是否可以在大鼠模型中使用。

关键词：AD，DBL，VDR，血压和血管损伤，血压－OMR，AD+VDR，DBL+VDR，AD+VDR+Om，AD，DBL

From the Institute for Aging and Health (V.D.), J.T.S. A.E.O., B.H.F., R.N.K., Campus for Aging and Vitality, Newcastle University, Newcastle upon Tyne, U.K.; Memory Clinic and Histopathology Department (V.D.) and Pathology and Histopathology Departments (E.-A.M.), C.N. Clinical Centre of France, Lille, France; and The Academic Unit of Pathology (T.T.), Medical School, University of Sheffield, Sheffield, UK.  
Study funding/financing information is provided at the end of the article.  
Disclosure Author information is provided at the end of the article.