Canadian Agency for Drugs and Technologies in Health

RAPID RESPONSE REPORT: SUMMARY OF ABSTRACTS

TITLE: Management of Calciphylaxis in Adult Patients with End-Stage Renal Disease: Evidence for Optimal Therapy and Guidelines

DATE: 14 April 2011

RESEARCH QUESTIONS

1. What is the optimal therapy for the management of calciphylaxis in adult patients with end-stage renal disease?

2. What is the clinical effectiveness of bisphosphonates versus sodium thiosulphate for the management of calciphylaxis in adult patients with end-stage renal disease?

3. What are the guidelines for the management of calciphylaxis in adult patients with end-stage renal disease?

KEY MESSAGE

No evidence-based studies were identified; therefore, no conclusions regarding the management of calciphylaxis in adult patients with end-stage renal disease can be presented.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2011, Issue 3), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI (Health Devices Gold), EuroScan, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit the retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2008 and April 11, 2011. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.

RESULTS

This is an update to a previous Rapid Response report completed in 2008 (Health Technology Inquiry Service. Management of calciphylaxis in adult patients with end-stage renal disease: evidence for optimal therapy and guidelines. Ottawa: Canadian Agency for Drugs and Technologies in Health; 2008 Jan 17).

For the current report no relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, or evidence-based guidelines were identified regarding the management of calciphylaxis in adult patients with end-stage renal disease. Related articles of potential interest are located in the appendix.

OVERALL SUMMARY OF FINDINGS

No literature was identified; therefore, no summary pertaining to the evidence regarding the management of calciphylaxis in adult patients with end-stage renal disease can be presented.

REFERENCES SUMMARIZED

Health technology assessments
No literature identified.

Systematic reviews and meta-analyses
No literature identified.

Randomized controlled trials
No literature identified.

Non-randomized studies
No literature identified.

Guidelines and recommendations
No literature identified.

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APPENDIX – FURTHER INFORMATION:

Review articles

1. Torregrosa J-V, Ramos AM. Use of bisphosphonates in chronic kidney disease. Nefrologia [Internet]. 2010 [cited 2011 Apr 11];30(3):288-297. Available from: http://www.revistanefrologia.com/modules.php?name=articulos&idarticulo=10320&idlangart=EN

2. Bhambri A, Del Rosso JQ. Calciphylaxis: a review. J Clin Aesthet Dermatol [Internet]. 2008 Jul [cited 2011 Apr 11];1(2):38-41. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2989826/pdf/jcad_1_2_38.pdf PubMed: PM21103322

3. Raymond CB, Wazny LD. Sodium thiosulfate, bisphosphonates, and cinacalcet for treatment of calciphylaxis. Am J Health Syst Pharm. 2008 Aug 1;65(15):1419-29. PubMed: PM18653812

4. Rogers NM, Coates PT. Calcific uraemic arteriolopathy: an update. Curr Opin Nephrol Hypertens. 2008 Nov;17(6):629-34. PubMed: PM18941358

Additional information

5. Hayden MR, Goldsmith DJ. Sodium thiosulfate: new hope for the treatment of calciphylaxis. Semin Dial. 2010 May;23(3):258-62. PubMed: PM20636917

6. Mason D, Best SD. Calcific uremic arteriolopathy: contemporary pharmacotherapy. Adv Chronic Kidney Dis. 2010 Sep;17(5):428-38. PubMed: PM20727513

7. Rogers NM, Coates PT. Calcific uremic arteriolopathy--the argument for hyperbaric oxygen and sodium thiosulfate. Semin Dial. 2010 Jan;23(1):38-42. PubMed: PM20331817

8. Schlieper G, Brandenburg V, Ketteler M, Floege J. Sodium thiosulfate in the treatment of calcific uremic arteriolopathy. Nat Rev Nephrol. 2009 Sep;5(9):539-43. PubMed: PM19701230

9. Hayden MR, Goldsmith D, Sowers JR, Khanna R. Calciphylaxis: calcific uremic arteriolopathy and the emerging role of sodium thiosulfate. Int Urol Nephrol. 2008;40(2):443-51. PubMed: PM18369733