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SPECIAL REVIEW

Marathon of eponyms: 13 Melkersson–Rosenthal syndrome

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The use of eponyms has long been contentious, but many remain in common use, as discussed elsewhere (Editorial: Oral Diseases. 2009: 15; 185). The use of eponyms in diseases of the head and neck is found mainly in specialties dealing with medically compromised individuals (paediatric dentistry, special care dentistry, oral and maxillofacial medicine, oral and maxillofacial pathology, oral and maxillofacial radiology and oral and maxillofacial surgery) and particularly by hospital-centred practitioners. This series has selected some of the more recognised relevant eponymous conditions and presents them alphabetically. The information is based largely on data available from MEDLINE and a number of internet websites as noted below: the authors would welcome any corrections. This document summarises data about Melkersson–Rosenthal syndrome.

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Also known as

Melkersson–Rosenthal–Schuermann syndrome
Miescher cheilitis
Miescher syndrome
Melkersson syndrome
MROS
MRS
Rosenthal syndrome II
Rossolimo–Melkersson–Rosenthal syndrome
Rossolimo syndrome

The condition

Melkersson–Rosenthal syndrome (MRS) is characterised by a triad of symptoms, typically with an onset in childhood or youth. It comprises recurrent facial paralysis (in 30% of cases), chronic oedema of face and lips and fissured tongue (lingua plicata). It may have autosomal dominant inheritance with variable expressivity. There is a chronic granulomatous aetiopathogenesis, and a suggestion of a responsible gene mapping to chromosome 9p11. Similar oral granulomatous reactions which are not associated with any detectable systemic disease or foreign bodies may be seen in Miescher's cheilitis and orofacial granulomatosis. Miescher's cheilitis (granulomatous cheilitis: GC) is the term used where lip swelling is seen in isolation (though acanthosis nigricans and diabetes may be associated). Lip swelling, sometimes with other oral lesions, has also been termed 'orofacial granulomatosis' (OFG) and may also be seen in Crohn's disease. Oral features of OFG and Crohn's disease may include the following, in any combination:

- facial and/or labial swelling,
- angular stomatitis and/or cracked lips,
- ulcers,
- mucosal tags and/or cobble-stoning,
- gingival hyperplasia.

The possibility that MRS, GC, OFG and Crohn's disease are the same condition has been raised a number of times and microscopically, they all appear to show submucosal chronic inflammation with many mononuclear, interleukin-1 (IL-1) producing, cells and non-caseating granulomas in the submucosa and lymph nodes. The inflammatory response is probably mediated by factors such as tumour necrosis factor (TNF) alpha.

It has been hypothesised that Crohn's disease involves augmentation of the Th1 lymphocyte response in inflammation. Susceptibility appears to be related in 15% to the CARD 15 gene, on chromosome 16. The most recent gene implicated is the autophagy gene ATG16L1, which may hinder the body's ability to combat invasive bacteria. Possibly caused by commensal bacteria in persons with a genetically determined dysregulation of mucosal T-lymphocytes, the microorganisms involved are unknown but many have been implicated. *Mycobacterium avium subspecies paratuberculosis* is one incriminated, but is probably just one of a variety of microorganisms simply taking advantage of the damaged mucosa and inability to clear bacteria from the intestinal walls. Other workers have implicated a

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lack of *Faecalibacterium prausnitzii*. Diet, oral contraceptives, NSAIDs, isotretinoin and smoking have also been incriminated.

Adverse reactions to various food additives, such as cinnamaldehyde or benzoates, butylated hydroxyanisole or dodecyl gallate (in margarine), or to menthol (in peppermint oil) or cobalt have been implicated in OFG.

It is possible that MRS, GC and OFG represent oligosymptomatic Crohn's disease, or a condition very similar to Crohn's disease.

Thorough investigation to eliminate these and other causes of granulomatous disease such as sarcoidosis is thus essential (biopsy; full blood picture, levels of albumin, calcium, folate, iron and vitamin B12, intestinal radiology, sigmoidoscopy and colonoscopy, chest radiography, serum levels of calcium, angiotensin-converting enzyme and gallium scan).

Diet-related cases can only be confirmed by an exclusion diet to eliminate food allergens. Skin tests may be useful to reveal various subjects.

MRS seems to respond well to corticosteroid treatment and occasionally systemic sulfasalazine or other antimicrobials (metronidazole, minocycline, rothixromycin), or other agents (clofazimine, ketotifen, infliximab or thalidomide) are required. The indication for surgery is minimal.

Background to eponym

Melkersson–Rosenthal syndrome was described by Melkersson in 1928 and, Rosenthal in 1931 emphasised that lingua plicata (fissured tongue) is commonly related. However, there are several earlier descriptions of the condition – by Paul Hübschmann (1894), Lothar von Frankl-Hochwart (1891) and Grigorii Ivanovich Rossolimo (1901).

Miescher's cheilitis is a monosymptomatic form of the Melkersson–Rosenthal syndrome, named after Alfred Guido Miescher, Italian-born Swiss dermatologist, born 4 November 1887, in Naples; died 1 September 1961.

The main persons

Ernst Gustaf Melkersson was born in Sweden in 1898, educated in Uppsala and later worked at the medical department of the Gothenburg Sahlgrenska sjukhuset. He died at an early age in 1932.

Curt Rosenthal was born in Germany in 1892 and worked at the University of Breslau psychiatry and neurology clinic. The designation Melkersson's syndrome was suggested to honour Melkersson, who had died so young, but the term Melkersson–Rosenthal syndrome has now been generally accepted. Rosenthal died in 1937.

Associated persons

Lothar
von Frankl-Hochwart
Paul Hubschmann
Ernst Gustaf Melkersson
Alfred Guido Miescher
Curt Rosenthal
Grigorii Ivanovich Rossolimo
H. Schuermann

Source internet sites (accessed 21 February 2009) and further reading

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