MUMPS OR EPIDEMIC PAROTITIS

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SUMMARY: An epidemic of mumps in a Gurkha battalion is reviewed, and the term 'epidemic parotitis' is questioned as an accurate term in view of the far commoner occurrence of the submandibular gland involvement than would be expected from the classical textbook descriptions of this disease.

Introduction

During the months of January to June 1971 inclusive, 51 cases of mumps occurred in the personnel and dependants of 7th Duke of Edinburgh's Own Gurkha Rifles serving in the New Territories in Hong Kong.

Of these cases 21 occurred in adults, 15 in men and 6 in women, and the remaining 30 cases occurred in children between the ages of 3 and 13. Treatment was simply with bed rest and analgesics, the cases being isolated in Ministry of Defence quarters or, in the case of single men, in an empty barrack room converted for the purpose. It is pertinent to note that of the 15 cases in men, 12 cases occurred in single men in one company.

Results

Of the 51 cases nearly all resolved spontaneously over a few days with no side effects. Two men were admitted to the isolation ward in the British Military Hospital, Hong Kong after quite severe unilateral orchitis had developed within 48 hours of the disease developing, these settled well without specific therapy.

There were no cases in which evidence of meningo-encephalitis, nerve deafness or pancreatitis occurred.

The interesting facts which were noted concerned the distribution of salivary gland involvement. On initial and subsequent follow-up examination, there seemed to be a commoner submandibular gland involvement, either unilateral or bilateral, than one would have expected. Because of this finding special note was made in each case to ascertain accurate clinical involvement of the submandibular glands. These results are listed in Table 1. It should be noted that they are summarised to denote the number of cases of parotid and submandibular gland involvement at any stage of the disease.

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<tr>
<th>Salivary gland development</th>
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<tr>
<td>Parotid glands</td>
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<td>Adults</td>
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<td>10</td>
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Notes: 60.8 per cent had parotid involvement alone, 29.4 per cent had parotid and submandibular involvement. 9.8 per cent had submandibular involvement alone, and 39.2 per cent of the total had some form of submandibular involvement.

In July 1971 a soldier from the same company in which there had been the twelve cases of overt mumps presented with the typical signs of meningitis. Examination of the c.s.f. revealed a lymphocytic picture, and serial viral studies showed a rising titre of mumps antibodies, which makes it likely that this was a case of mumps encephalomyelitis. However, the man in question was never found to have any salivary gland enlargement although he ever had mumps as such, we shall never know.
Discussion

Text books state that involvement of the other salivary glands, such as the sub-mandibular and sublingual glands as well as involvement of the parotid glands, occurs in only 20 per cent of cases of mumps. They also state that involvement of the sub-mandibular glands without involvement of the parotid is rare.

In this series of cases, albeit very small, these facts would seem to be inaccurate and open to question, as submandibular gland involvement either in conjunction with parotid gland involvement, or as a single entity, was far more commonly noted.

It must be stressed that submandibular gland enlargement was noted on clinical observation only, and no attempt was made to provide laboratory confirmation of the disease in the form of rising viral antibody titres or other tests. However, in those cases in which submandibular gland involvement occurred alone special care was taken to exclude any other local pathology and in no case was evidence found of concurrent local sepsis, for example, tonsillitis, pharyngitis, maxillary sinusitis, dental sepsis or external and and/or middle-ear infection. Furthermore, the disease resolved spontaneously without specific therapy, such as antibiotics, and in no case was residual submandibular gland enlargement occurred.

As a result of this investigation the term epidemic parotitis would seem to be inaccurate. If mumps is not a sufficiently accepted term, perhaps the Gurkhali misnomer “Galfula” would be more appropriate.

REFERENCES