Mumps virus infection with laryngeal oedema and thoracic wall phlegmonous inflammation in an adult

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DESCRIPTION
A 27-year-old Bangladeshi complained of fever (39.2°C) and tenderness of the neck. He was admitted to our hospital. A fiberoptic laryngoscopy revealed oedema of the right side of the epiglottis. A CT scan showed a swelling of the bilateral parotid glands, submandibular glands and the right side of the epiglottis, and the neck and anterior thoracic wall showed phlegmonous inflammation (figure 1). Laboratory tests showed a leucocyte count of 7.2×109/l (neutrophils 59.1%, lymphocytes 30.4% and monocytes 6.3%), serum amylase of 1250 IU/l and C reactive protein of 1.44 mg/dl. He had not been vaccinated against mumps and had no history of mumps infection. The mumps titre was positive for IgM. The swelling gradually resolved within 3 days and the patient improved without complications by symptomatic therapy.

In Japan, routine mumps vaccination was discontinued in 1933. In previous reports, cases with mumps-related laryngeal oedema were only of adult Japanese because of the high incidence of mumps in Japan.1 Only a few countries in Southeast Asia (9%) and Africa (4%) use mumps vaccines in their national schedules.2 In these areas, there is the possibility of mumps-related laryngeal oedema as in the present case of a Bangladeshi. On the other hand, the UK, the USA, Canada and Ireland have recently had large outbreaks of mumps in young adults in spite of the high use of mumps vaccines (>94%).2 Laryngeal oedema may accompany mumps infection even in non-Japanese people. Therefore, it is necessary to keep the possibility of laryngeal oedema in mind when clinical doctors (including family doctors) encounter patients with mumps.

Learning points
▸ Complications by mumps tend to be more severe in adults than in children.
▸ It is possible to follow laryngeal oedema with mumps infection in the large outbreaks.

Competing interests None.
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REFERENCES

Figure 1  Swelling of the parotid glands (asterisks), submandibular glands (thin arrows) and epiglottis (thick arrows). The neck and anterior thoracic wall reveal phlegmonous inflammation (arrow heads).