



Short reports and correspondence

Streptococcal myositis

I read with interest the case of streptococcal myositis that was recently reported by Dalal et al.¹ The authors are correct in stating that, 'Emerging antibiotic treatment for severe group A streptococcal infections includes adding clindamycin to high doses of penicillin.'

My colleagues and I recently completed a population-based retrospective study of invasive group A streptococcal (GAS) infections in the southern state of Florida, USA (population of Florida in 2000: 15 658 227).^{2,3} A total of 257 cases of invasive GAS infection were identified. These cases were patients who were hospitalised throughout Florida between August 1996 and August 2000 and were reported to the Florida Department of Health. The overall hospital mortality rate was 18% (41/228). We found that treatment with clindamycin strongly protected against hospital mortality in patients who had necrotising fasciitis (adjusted odds ratio = 0.11, $p = 0.038$) but not in patients who did not have necrotising fasciitis (adjusted odds ratio = 1.01, $p = 0.989$).² Both of these odds ratios were adjusted for the use of beta-lactam antibiotics and other relevant variables.

Mr Dalal and colleagues wisely point out the need for the rapid diagnosis of an invasive GAS infection. I re-examined our case series and found that invasive GAS infection was suspected in only 2% (5/228) of these patients at the time of admission to hospital. Two of the 257 cases had streptococcal myositis (both of these patients also had GAS bacteraemia). The outpatient clinician needs to be aware of this rare but potentially fatal manifestation of invasive GAS disease.

References

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About a case of parotid gland abscess by *Bacillus Licheniformis*

Parotid abscesses are a very uncommon pathology, which may occur in immuno-incompetent patients or might sometimes be related to foreign body injuries.

At the Department of Maxillofacial Surgery of the School of Medicine and Surgery of 'Federico II', University of Naples, we recently observed an interesting case of parotid abscess caused by *Bacillus Licheniformis*, previously unreported as a pathologic agent of parotid infections.

The patient, a 48-year-old Caucasian male, presented with a swelling in the left parotid region. The lesion grew in about 2 months, until it reached the dimension of $2.5 \times 2 \text{ cm}^2$.

The patient was in good general health and there were no signs of injuries in the parotid region.

The lesion was covered by normal skin, smooth in appearance, painful, tender and well circumscribed; no sign or symptom of facial nerve involvement was present.

The patient had already undergone a CT scan, with intravenous iodine medium infusion, which revealed an enlargement of the left parotid gland due to the presence of a 2.5 cm roundish mass of the inferior parotid portion, with peripheral contrast enhancement; a bilateral swelling of the lymph nodes of the neck was also present (Fig. 1).

Ultrasound examination of the left parotid gland revealed a $2.3 \times 1.7 \text{ cm}^2$ nonhomogeneous hypoechoic ovoid mass. Fine Needle Aspiration Cytology (FNAC) was inconclusive.

Under general anaesthesia, the parotid mass was



Fig. 1 CT scan showing enlargement of the left parotid gland due to the presence of a 2.5 cm roundish mass of the inferior parotid portion, with peripheral contrast enhancement.

enucleated, under control of a nerve stimulator (Fig. 2). The specimen measured 2.3×1.5 cm and was brownish, tender, covered by a thin capsule. On cutting the specimen, a white-yellowish caseous-like material was released and a microbiologic assay and antibiogram showed positivity for *B. Licheniformis*.

The patient was treated with an amoxicillin-clavulanic acid association, 1 g twice a day for 5 days. The postoperative course was normal with prompt improvement. The function of the facial nerve was totally preserved. Two months after intervention the abscess had completely resolved with a very good functional and cosmetic result.

B. Licheniformis is a Gram positive micro-organism of the I B group, like the *Bacillus*

coagulans, *Bacillus firmus*, *Bacillus subtilis*, etc. Microbiological assay consists in a growing plate (nutrient agar with beef extract 3.0 g, peptone 5.0 g, agar 15 g and distilled water 1.0 l) or in anaerobiosis growth technique, to evaluate and classify the bacteria.¹

B. Licheniformis is frequently found in ocular infection, but it is possible to recognise it in the gastrointestinal tract, since it is often present on fresh food incorrectly washed.² *B. Licheniformis* is very responsive to treatment with most antibiotics such as amoxicillin-clavulanic acid, gentamycin, amycacin, kanamycin, and to all tetracyclines.

Parotid abscesses are very rare but in case of sialadenitis associated with a parotid mass, this occurrence should be suspected to avoid unnecessary surgery.



Fig. 2 Intraoperative view of the mass.

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Clinical audit of outpatient tissue expansion complications

We retrospectively audited complications following outpatient tissue expansion in our unit for a four year period from 1994 to 1998. Sixty-one patients underwent tissue expansion during this time, excluding those performed for breast reconstruction. Using published series^{1,2} as a standard for complication rates we found that we had a major complication rate of 11% (7/61) and a minor complication rate of 39% (24/61). Major complications were defined as those that altered the original surgical plan and minor complications as those cases where the planned reconstruction was still successfully performed.² Thirty-eight percentage (23/61) of cases were complicated by infection. During this period, inflation of tissue expanders was carried out on an ad hoc basis by on-call senior house officers who had simultaneous responsibilities for seeing emergency admissions

and ward cover. It was postulated that the high infection rate was caused by poor or rushed technique during expansion.

Change was implemented by training senior nursing staff in the outpatient department to perform inflation of tissue expanders. Expansion was carried out by these members of staff from 2001 onwards. The complication rate was re-audited for the first 25 cases and found to be a major complication rate of 12% (3/25) and a minor complication rate of 24% (6/25). The number of cases complicated by infection was reduced to 16% (4/25 $p < 0.05$ chi square test). This is an example of nurse led practice leading to an improved patient outcome. The audit loop was closed.

References

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