A study of antibiotic prescribing in an emergency dental clinic

Are antibiotics being used appropriately for emergency dental treatment? by Y. M. Dailey and M. V. Martin
Br Dent J 2001; 191: 391-393

Aim
To investigate the therapeutic prescribing of antibiotics to patients presenting for emergency dental treatment.

Design
A prospective clinical study.

Method
Information was collected via a questionnaire concerning the patient's reason for attendance and treatment undertaken at emergency dental clinics in North and South Cheshire.

Results
Over an 11-week period 1,069 patients attended the five clinics, 1,011 questionnaires were analyzed. The majority of the attendees had pain (879/1011). 35% (311/879) of these patient had pulpitis and 74% (230/311) had been issued a prescription for antibiotics, without any active surgical intervention. The principal antibiotic prescribed for both adult and child patients was amoxicillin.

Conclusion
The majority of patients attending the emergency dental clinics had pain, with a large proportion having localised infections either as pulpitis or localised dental abscess. Three quarters of these patients had no surgical intervention and were inappropriately prescribed antibiotics.

In Brief
- A sizeable study of GDP antibiotic prescribing in an emergency dental clinic
- Evidence of incorrect prescribing behaviour by practitioners
- An attempt to seek explanations and ways for achieving improved prescribing

Comment

This large study records actual decisions on antibiotic prescribing made by general dental practitioners staffing an emergency dental clinic in the North of England. It adds to the weight of evidence suggesting that dentists in general practice, in common with their medical colleagues, do not do what they are told they should by the teachers and theoreticians. Surely there cannot still be colleagues who have not heard the message about appropriate prescribing, so why is it not being taken on board?

The principles are not new — they have been part of undergraduate teaching for at least 20 years, and yet this survey confirms that, faced with an uncertain diagnosis and a demanding patient who is, in the circumstances described, a stranger to them, the dentist will still bow to the patient's expectation and prescribe them an antibiotic. Or maybe they were tempted to take the lazy option, especially in a clinic where they were presumably paid for attendance rather than by item of service, and where they were unlikely to have to see the patient again. As the authors suggest, we need somehow to find out why this problem is so intractable by asking dentists themselves, if a way could be devised to obtain honest responses rather than pious denials or guilty evasions.

While a pragmatic decision to try to 'damp down' an odontogenic infection may occasionally be justified as an interim treatment in difficult circumstances — for example a mild infection presenting at a time when complex definitive treatment is convenient for neither patient nor dentist — it should never become a routine policy. The possibility of some good for the individual patient will probably always outweigh the theoretical damage to the population and the environment, but an antibiotic can only be an adjunct to good dental surgical care and not a substitute for it.

If change is to be achieved, perhaps a more important target for re-education is the public rather than the dentist. Regular patients are becoming more sophisticated and maybe if they were given enough information in the form of a practice antibiotic policy leaflet or a waiting-room notice, they might be more accepting of a policy of restraint and selectivity.

David A McGowan
Emeritus Professor of Oral Surgery University of Glasgow