Drain away the pain

Efficacy of first aid treatment of acute apical abscess in an NHS emergency clinic
Br Dent J 2018; **224:** 523–527 http://dx.doi.org/10.1038/sj.bdj.2018.xxx

As the patient walks in holding their face in pain, with tired eyes from the lack of sleep, practically whimpering at you from the agony they are experiencing, you can only empathise. As the emergency appointment goes on you rack your brain with the best solution to help relieve the patient of such pain. However, the treatment option that you decide upon another dentist may not, but which is the most successful?

This paper endeavours to establish whether NHS emergency dentists can successfully reduce pain caused by an acute apical abscess (AAA), as well as to determine whether or not reduction of this pain differs between different treatments. The study, being the first of its type in an NHS setting, assesses the pain reduction in patients treated for AAA with three different management techniques used: provisions of antibiotics, drainage, and a combination of the two. The pain being experienced by the patient was assessed using a pain scale prior to treatment, and then again at 24 and 72 hours post-treatment (by calling the patients).

The results demonstrated that NHS emergency dentists have proven to be successful in reducing pain for such patients. Additionally, it can be concluded that antibiotics give no benefit for pain relief in these cases. Therefore, drainage should always be used when achievable, and antibiotics alone should be avoided as first-line management of such cases. This conclusion was made as a result of a greater pain reduction by the method of drainage. Drainage used with an antibiotic prescription had no difference in pain reduction compared to that of drainage alone, showing that there is no additional benefit in using antibiotics for the treatment of AAA. It must be noted that the paper did not consider the use of antibiotics in regard to the spread on infection; only in relation to pain.

The authors did discuss how the use of a placebo here would have been useful although unethical. They also made a clear acknowledgment that the trial was undertaken in a well-staffed well-equipped clinic which may not be the case in other NHS clinics. Antibiotic resistance is an increasing worldwide danger to our health; something dental prescribers should be aware of.

How will you be treating the next emergency AAA patient who walks through your door?

By Brontë Chandrasekara

Author Q&A

Scott Aaron
Berry Lane Dental Clinic

Why did you choose to study this?

I have been organising emergency dental clinics since 2008. I first got involved in this because I felt patients seen on emergency clinics had been inappropriately prescribed antibiotics instead of extirpations or extractions. Often dentists and patients say that antibiotics work irrespective of what published guidelines say. I wanted to know how the different management strategies affected the amount of pain people were suffering and I couldn't find the answer within previously published research. I always want the patients who are seen on the clinics I'm responsible for to receive the best care available. This encompasses good pain management and antibiotic stewardship.

Did anything surprise you in the results?

I was not surprised by the main results as they agree with previous guidance but found it interesting to note that antibiotics and drainage provided no additional benefit compared to drainage alone. This implies that the belt and braces approach of drainage and antibiotics may be as outdated as prescribing antibiotics without drainage.

Would you advise more GDPs to get involved in research?

Very much so, even though it is not easy. Each stage was harder than I expected (designing the study, getting ethical approval, staff training, recruitment of patients, writing up the paper, bringing it to publication). I was very lucky to have a mentor and co-author as knowledgeable, experienced and willing to give me his time as Professor Steier. I've learnt a lot about both this subject and about the way scientific articles are written. I'd like to know how to define the level of spreading infection which requires antibiotic treatment. More broadly, I'd love to know how to transfer scientific knowledge into behaviour both for dentists in the treatment we prescribe and for patients in the preventative actions they take. ■