Dental anxiety: detection and management

Mohammad O. SHARIF

BDS (Hons), MJDF RCS Eng, National Institute for Health Research In-Practice Research Training Fellow. School of Dentistry, University of Manchester, Manchester, United Kingdom.

Corresponding address: Mohammad O. Sharif, Oral Health Unit, School of Dentistry, University of Manchester, Coupland 3, Room CG111, Higher Cambridge Street, Manchester, M15 6LP, Manchester, United Kingdom - e-mail: mohammad.owaise.sharif@googlemail.com

Historically dental anxiety has been attributed to the expectation of pain^{1,4,10}. Over the past century this has been the main driver for improvements in pain control. However, despite the advances in pain control worldwide figures on the prevalence of dental anxiety are still in the region of $10-15\%^{2,7,14}$ and therefore it is still a significant barrier to dental care for a consistent proportion of the population^{5,9}. Dental anxiety not only leads to the avoidance of dental care but it also effects individuals generally, one report has shown that it causes sleep disturbance, negative thoughts and feelings of low self esteem and confidence³.

Detection of dental anxiety

In a large number of cases clinical impression alone will alert the clinician of the presence of anxiety. Subjective assessment can be used as well as formalized questionnaires⁸. One example of the use of formalized questionnaire used for adults is the Modified Dental Anxiety Scale (MDAS), this is a brief five item questionnaire, which is used to help objectively identify patient anxiety levels⁶.

For children picture tests such as the 'Venham Picture Test' are commonly used, the child indicates his/her level of anxiety by picking out a picture that illustrates their perceived emotion⁷. The images commonly used are faces with a value of 1-5 with 5 representing higher dental fear.

Management of dental anxiety

Approaches for dental anxiety management should be discussed with the patient. This will provide the patient with a feeling of involvement and helps them cope with the stresses associated with dental visits more effectively¹¹⁻¹³. For anxiety management to be effective it should be tailored for individual patients. There is spectrum of options that should be employed for anxiety control in which least invasive approaches are used first i.e. non-pharmacological approaches (communication, behaviour management) and local anaesthesia (pain control). Should these fail to control anxiety effectively or it is anticipated that these approaches will be insufficient, we then move onto the use of pharmacological adjuncts (inhalation sedation, intravenous sedation and general anaesthesia) (Figure 1).

Conclusion

The effective management of dental anxiety is of paramount importance, this management needs to consist of a multifaceted approach. For the approach to be effectively tailored to provide maximum benefit for

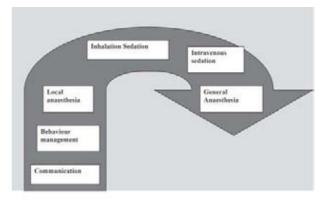


Figure 1- Spectrum of anxiety management approaches

patients dentists need to be efficient at detecting the presence of anxiety and be able to tailor management according to patient needs.

References

1- Bregstein SJ. Psychology in dentistry. Dent digest. 1923;29:387-9.

2- Chanpong B, Haas DA, Locker D. Need and demand for sedation or general anaesthesia in dentistry: a national survey of the Canadian population. Anesth Prog. 2005;52:3-11.

3- Cohen SM, Fiske J, Newton JT. The impact of dental anxiety on daily living Brit Dent J. 2000;189:385-90.

4- Dinjian MD. The psychic factor in dental practice Dent Surg. 1921;17:471-5.

5- Freeman R, Clarke HM, Humphris GM. Conversion tables for the Corah and modified dental anxiety scales. Community Dent Health. 2007;24:49-54.

6- Freeman RE. Dental Anxiety: a multifactorial aetiology. Brit Dent J. 1985;159:22-30.

7- Hakeberg M, Berggren U, Carlsson SG. Prevalence of dental anxiety in an adult population in a major urban area in sweeden. Community Dent Oral. 1992;20:97-101.

8- Holmes RD, Girdler NM. A study to assess the validity of clinical judgement in determining paediatric dental anxiety and related outcomes of management. Int J Paed Dent. 2005;15:169-76.

9- Humphris G, Dyer T, Robinson P. The modified dental anxiety scale: UK general public population norms in 2008 with further psychometrics and effects of age. BMC Oral Health. 2009;9:20. 10- MacFarlane DW. The psychology of dental fear. Br Dent J.

1938;65:22-30.

11- Massler M. Psychology in dentistry for children Diastema. 1968;2:53-6.

12- Rachman S. Anxiety. New York: Psychology press; 2004.

13- Robins C, Robins WV, Rawson HE. Maternal anxiety and children's behaviour during dental procedures. J Mo Dent Assoc. 1973;53 47-55.

14- Skaret E, Raadal M, Berg E, Kvale G. Dental anxiety among 18 year olds in Norway. Prevalence and related factors. Eur J Oral Sci. 1998;106:835-43.