

Patient profile for management of paediatric dental/needle phobia- a retrospective audit

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Introduction

A variety of management strategies exist for treating dentally phobic and/or needle phobic paediatric patients. Coping styles: monitors (information seeking) seem to prefer needle desensitisation¹ (ND) (Fig 1+2) with relaxation, the Wand STA system, cognitive behavioural therapy (CBT) and referral to the clinical psychology service (CPS); blunters (also offered IV sedation) may prefer hypnosis and the Wand STA. These anxiety management strategies may be used in combination to help tailor the treatment to the individual patient's coping style and fears.

The aim of this audit was to establish a profile of needle phobic children/adolescents for whom dental treatment was completed.



Fig 1: ND stage 4- holding assembled syringe

Fig 2: ND stage 5- "cap on" practice

Methods

Case records for 30 dentally phobic patients in GDH&S were selected. Information was recorded on patient demographics, MCDASf (Faces version of the Modified Child Dental Anxiety Scale) scores (Fig 3), anxiety aetiology, patient coping style (monitoring/blunting) and management strategy used to facilitate care and resolve fear/phobia.

MCDASf responses for each question:

- 1 Relaxed/ not worried
- 2 Very slightly worried
- 3 Fairly worried
- 4 Worried a lot
- 5 Very worried

How do you feel about	٢	\odot	\bigcirc	\bigcirc	0	
	0					
1 going to the dentist generally?	\mathbf{O}	2	3	4	5	
having your teeth looked at (check-up)?	1	(2)	3	4	5	
3 having your teeth scraped and polished?	1	2	3	4	5	
4 having an injection in the gum (to freeze a tooth?)	1	2	3	4	\bigcirc	
5having a filling?	1	2	(3)	4	5	
6 having a tooth taken out?	1	2	3	4	\bigcirc	
7being put to sleep to have treatment?	1	2	3	4	\bigcirc	
8having a mixture of 'gas and air' which will help the	уоц					
feel comfortable for treatment but cannot put you to sleep?	1	2	3	4	5	
having a medle put in the back of your hand with cream on to keep it comfortable?	1	2	3	4	\odot	
white create on to help it controllable:				3	1/45	

Fig 3: Example of a completed MCDASf, showing a score of 31/45 which indicates dental phobia

Results

Twenty four case records were available for evaluation. Demographics: median age 13, 58% female, 79% ASA I, 92% high caries risk. Anxiety:

• Median MCDASf at start of treatment: 33.5

- 46% Medical needle phobia
- 62% Dental needle phobia
- 79% Aetiology recorded

Of patients treated successfully, the following modalities were used, some with combined treatment:

Modality	Success Rate (%)	Number of patients treated successfully
Wand STA	100%	14
ND	67%	8
CBT	80%	4
Hypnosis	67%	4
CPS	57%	4

THE Paediatric Clinical Psychology Service at RHSC Yorkhill





Figs 4 + 5: Referral to clinical psychology and use of the STA Wand can be effective in resolving dental anxiety

Conclusion

Many dentally phobic adolescents present with intra oral needle phobia with almost half have a medical fear of needles.

A combined approach for managing this group was successful, the wand STA system is particularly helpful with and without ND (with relaxation). Referral to psychology services benefitted some of this group.

A complete data set was not always documented. A standard sheet is now in use for new patient assessment, this will also help database management and future audit.

References

1. Taylor GD, Campbell C. A clinical guide to needle desensitization for the paediatric patient. Dental Update 2015; 42 (4): 373-382.