

# Local Anaesthetic Out-Patient Surgery on Needle Phobic Patients

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## Abstract

This short report relates to the difficulties of operating on needle phobic patients under local anaesthesia. Several useful hints for managing these patients are presented.

Sir,

Needle phobia or belonophobia is defined as an unreasonable and altered response due to the fear of needles, and has been estimated to affect 3-4% of the population.<sup>1</sup> It is more common in children, but most doctors and surgeons have encountered adult patients with the problem. It is a particular problem for specialties like plastic surgery, which have a high volume of local anaesthetic procedures.

The authors have encountered several instances of patients developing vagal episodes during local anaesthetic infiltration. Sometimes the information about the fear or phobia of needles is not volunteered until shortly before anaesthetic infiltration. Generally the operation proceeds, but vagal episodes during surgery are a risk and may lead to delays or complications.

The most important part of the procedure is local anaesthetic infiltration. It involves a needle, pain is induced, and the patient's response to this stage will affect the rest of the operation. For example, when administering periauricular anaesthetic before bilateral otoplasty, patients seem to invariably indicate that the second ear is more painful. This may be a conditioning response, such that the patient anticipates pain when injecting the second ear.

The following suggestions should be beneficial when dealing with needle phobic patients:

1. Identify the problem early, preferably at the initial outpatient visit. Explain what the operation will involve, including the use of needles. Patients who are told that their finger will be 'frozen' for the

surgery may not know how this is done. On hearing the word 'injection', true needle phobic patients will quickly alert you to their problem.

2. Clarify the extent of the problem. There is a significant difference between not liking needles and a true phobia. Give the patient time to discuss specific fears. These often result from previous negative experiences, particularly in childhood.
3. Reach a decision with the patient about the best way to proceed. A general anaesthetic may not necessarily be appropriate, particularly for minor procedures. Consider options such as local anaesthetic with varying levels of sedation. It is better that the decision is reached at the clinic, since patient and surgeon will know exactly what to expect.
4. Topical anaesthetic creams are used extensively in the paediatric setting, and may be helpful for some adults.
5. Use the smallest possible calibre of needle, with as few injection sites as possible. Avoid letting the patient see the needle or the syringe before infiltration.
6. Insert the needle first and then attach the syringe. This allows more gentle control of the needle, and if the patient withdraws the needle stays in place.
7. Consider distraction techniques such as asking the patient to cough at the time of skin puncture.<sup>2</sup> An assistant can help by talking to the patient or

holding their hand.

8. Ensure a safe environment with the patient recumbent and regular pulse and blood pressure monitoring. If the patient feels faint or develops a vagal episode during surgery, stop the procedure and allow time for recovery.
9. These patients may be more appropriate as day cases rather than outpatients, since the former means a bed is available if a vagal episode persists.

Yim<sup>3</sup> has recently described a three step behavioural approach in the management of belonophobia, which involves recognition and relaxation, control and preparation, and graded exposure. The long term management of needle

phobia may be addressed by a patient's General Practitioner, but in the short term, the above tips should help the surgeon identify the needle phobic and make appropriate plans for surgical intervention.

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### **References**

1. Fernandez PP. Rapid desensitization for needle phobia Psychosomatics 2003 May/Jun; 44(3):253-4.
2. Ahmed OA, Ahmed AO, Imran D, Ahmed S. Coughing to distraction. Br J Plast Surg. 2004 Jun; 57(4):375-6.
3. Yim L. Belonephobia--a fear of needles. Aust Fam Physician. 2006 Aug; 35(8):623-4

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