

### ***Perioperative Immunisation under anaesthetic***

A 16 year old patient booked for an elective ENT procedure has a severe needle phobia. As a result she has not had any immunisations since early childhood. The family (and the patient) request that immunisation be performed during the anaesthetic. Is this a reasonable request? Would the vaccination be effective at this time? Would it interfere with surgery?

**Discussion:-** This topic has been an issue of some controversy, particularly about 2006-7, when there were various views 'in the literature'. A useful statement has been produced by the Association of Paediatric Anaesthetists of Great Britain and Ireland (attached).

It is suggested that vaccination with a inactivated vaccine one to two days prior to surgery may be unwise as, the febrile response to the vaccine may confuse observations at the time of surgery. (i.e. suggest the patient is having an early febrile illness, and lead to cancellation of surgery etc) For live attenuated vaccines this may not be a consideration. It is unlikely to be an issue regarding vaccination at the time of minor surgery,

With regard to the effectiveness of the vaccine, although the immune system may be somewhat suppressed by the effects of surgery (particularly major surgery) the efficacy of the vaccines is such that there is still high immunisation success. Thus the efficacy of the vaccine given at the time of surgery would be equivalent to that given at any other time. There is an argument that giving paracetamol to suppress fever may reduce the effectiveness of inactivated vaccines.

It could be argued that agreeing to the request plays into the psychological turmoil arising from the patient's background, and reinforces dysfunctional behaviours and psychological dynamics, and "adds fuel to the fire". That said, the benefits of improving the patient's vaccination status are such that it would seem appropriate to go along with the family request, and allow the long-term psychological and behavioural issues to be dealt with elsewhere. Thus it was agreed that as long as there was informed consent (given the patient's age and competency status), it was appropriate to go ahead as requested.