<p>14. Where do you get your needles and syringes from?
The hospital
Your general practitioner
Purchased</p> <p>15. The hardest thing about the injection is
Mixing
Drawing up
Putting the needle in</p> <p>16. How often do you get a prescription from your doctor for the growth hormone?
Every week
Every 2 weeks
Every 3 weeks
Monthly
Longer</p> <p>17. Do you use a sharps bin to dispose of the needles and syringes?
Yes
No</p> | <p>18. If you were going on holiday would you?
Take the injections as normal
Have a break from the injections
Use up the vial then stop</p> <p>19. Would you like any further help or information?
Yes
No</p> <p>20. (a) Do you belong to a patient support group?
Yes
No

(b) If yes, which one?
.....</p> <p>21. How many marks on the syringe do you inject each day?
.....</p> <p>22. Would you like to make any further comments?</p> |
|--|--|

NO in pyloric stenosis

Nitric oxide (NO) is clearly a very 'in' molecule in physiological circles (see *Archivist* 1992:934). It causes relaxation of gut muscles in animals as well as being a strong vasodilator. The relaxation of the smooth muscle of the gastrointestinal tract is brought about by the action of non-adrenergic, non-cholinergic (NANC) nerves. Until recently it was thought that the principal mediator of NANC controlled inhibition was vasoactive intestinal polypeptide (VIP) but the evidence now available makes it likely that the mediator is NO.¹

The enzyme NADPH diaphorase, which can be detected histochemically, is identical to NO synthase. Workers in Brussels (Jean-Marie Vanderwinden and colleagues, *New England Journal of Medicine* 1992;327:511-5) have used histochemical and immunohistochemical techniques to examine pyloric tissue from nine babies with hypertrophic pyloric stenosis and seven controls. Normal tissue showed NADPH diaphorase activity in the nerve fibres of both the circular and longitudinal muscle and in the nerves of the myenteric plexus. In pyloric stenosis, however, the enzyme was absent from the nerves of the circular muscle although still present in the longitudinal muscle and in the myenteric plexus. The nerves of the circular muscle were also morphologically abnormal.

Babies with pyloric stenosis, therefore, lack the enzyme (NO synthase) necessary for the production of NO in the nerves of the circular muscle of the pylorus. This may explain the inability of the pyloric muscle to relax and the work raises the possibility that an effective medical treatment for pyloric stenosis could be developed.

ARCHIVIST

1 Milla PJ. Gastric-outlet obstruction in children. *N Engl J Med* 1992;327:558-60.