tions. His general condition was good and nothing abnormal was detected in any of the vital systems. During a series of readings the blood pressure remained in the region of 127/80.

Comment

Trauma does not seem to have played any part in the causation of the skin reactions in this case. The injections were administered for two and a half years without any visible skin change, and while, so far as the arms are concerned, trauma from repeated injections could have been a causative factor, this cannot be said of the new areas of skin used after the onset of the cutaneous reactions, as necrotic lesions developed on these even after the first injection into them, and continued to develop after each fresh injection until all accessible areas on the limbs had been exhausted and encroachment on to the chest wall had begun. This would suggest that the patient had developed a specific sensitivity to adrenaline, localized to the area of injection and affecting the blood vessels. This is in accord with Delaunay *et al.*, who considered, from their experimental work with guinea-pigs, that the skin reactions were of an allergic nature.

Summary

A case of necrosis of the skin after prolonged self-administration of adrenaline by injection, in an asthmatic patient, is described.

Trauma, which was a possible causative factor in some of the cases reported, did not seem to play a part in this case.

It is suggested that an allergy to adrenaline developed after repeated injections over a long period and that this is in accord with the experimental findings of Delaunay *et al.*

REFERENCES

- Delaunay, A., Delaunay, M., and Lebrun, J. (1948). *C.R. Acad. Sci., Paris*, 227, 314.
Hanke, H. (1936). *Chirurg*, 8, 684.
Robertson, C. K. (1951). *Edinb. med. J.*, 58, 555.
Urbach, E. (1936). *Med. Klin.*, 32, 769.

Medical Memorandum

Torsion of a Mesenteric Lymphatic Cyst

Intra-abdominal lymphangiomas or lymphatic cysts seem to occur most commonly in the great omentum, and it is extremely rare for them to develop in the mesentery (Macnab and Menzies, 1950). As they are usually discovered accidentally during an exploratory laparotomy, the following case is of interest.

CASE REPORT

Abdominal pain began at 3.30 p.m. on October 2, 1951, in a boy aged 3½ years. After a normal bowel action the pain disappeared, but it came back at 8 o'clock the same evening. The child cried throughout the night and complained of pain in the abdomen and back, and said that he could not sit up in bed. He did not vomit but his appetite was poor. He also complained of pain in the abdomen while passing urine, and, although this was clear, his mother noticed that it had a strong odour.

The child was admitted to hospital at 2 p.m. on October 3 and was obviously ill. His temperature was 100.4° F. (38° C.), pulse rate 140, and respirations 28. Abdominal examination revealed some tenderness and rigidity on the right side, mainly below the umbilicus. The tongue was coated and a little "smelly." Rectal examination revealed some tenderness on the right side of the pelvis. The heart, lungs, and nervous system showed no abnormality, and the urine was normal. The history and physical signs at this stage suggested an acute appendicitis. A few hours later the abdomen became completely rigid on both sides, more so below the umbilicus, and a laparotomy was decided upon.

Operation.—As soon as the child was under the anaesthetic a swelling in the abdomen was visible to the naked eye. This was about 3 in. (7.5 cm.) in diameter, was hard, and was freely movable in all directions. Its position was approximately central in the abdomen, and a hand could be placed beneath it above the symphysis pubis. A right paramedian incision was made and the peritoneum was opened. A small amount of serous effusion was found, together with clots of fibrinous exudate, which appeared to be mainly present on the common and external iliac vessels on the right side. The appendix appeared normal. The swelling was seen in the hypogastrium and looked tense and purplish in colour, and on its delivery through the wound it underwent a spontaneous untwisting. It appeared to be a multilocular cyst in the mesentery of the ileum, approximately 2 ft. (60 cm.) from the ileo-caecal junction. The cyst was in actual contact with the intestinal wall, enveloping the ileum on three sides in a U-shaped manner. It did not extend into the retroperitoneal tissues, nor was there any evidence of communication between it and the mucous lining of the intestine. The locules intercommunicated, and contained a blood-stained clearish fluid, together with blood clots and flakes of fibrin; the walls of the cyst except those adjacent to the ileum were excised, and the cut edges of the mesentery brought together with interrupted catgut sutures. There was no evidence of intestinal obstruction, the colour of the ileum improving after the untwisting.

A course of "distaquine" penicillin and "cremomera-zine" was given, the clips being removed on the fifth day, and the child began to take a normal diet. Recovery continued uninterrupted.

The section showed a cyst wall composed of fibro-elastic tissue and lined by a single layer of flat endothelium. The wall showed congestion, degeneration, and polymorphonuclear and round-cell infiltration. The pathologist stated that the appearance was that of a strangulated lymphatic cyst of the mesentery.

COMMENT

Considering the clinical aspects of mesenteric cysts as a whole, Aird (1950) states that usually the only sign is that of a floating abdominal tumour, which is painless unless the cysts become infected from the bowel, when they lose their mobility and adopt the features of a well-localized abdominal abscess. In this case there was no infection, and the tumour was not palpable before the anaesthetic was given. Macnab and Menzies (1950) say that these cysts do not produce a constant clinical picture. They may present as an abdominal catastrophe, as in this case. Severe pain, vomiting, and abdominal rigidity may predominate, or there may be just an ill-defined malaise. The history of each case seems to be determined by the complications which have occurred. One-third of the cases produced intestinal obstruction (Waters, 1946). The cysts may undergo torsion, as in this case, or produce an intestinal volvulus. They may rupture into the peritoneal cavity and simulate acute peritonitis, or ruptured tubal gestation in women. They may become infected and present as an acute appendicitis or diverticulitis.

Regarding their aetiology, Lord Moynihan (1897) stated that they were simple dilatations of lymphatic vessels. Illingworth and Dick (1949) favour the view that they are dilatations of lymph vascular networks present in embryonic life, like cystic hygroma in the neck.

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REFERENCES

- Aird, I. (1950). *Companion to Surgical Studies*, p. 568. Livingstone, Edinburgh.
Illingworth, C. F. W., and Dick, B. M. (1949). *Textbook of Surgical Pathology*, p. 554. Churchill, London.
Macnab, I., and Menzies, T. (1950). *Brit. J. Surg.*, 37, 294.
Moynihan, B. G. A. (1897). *Ann. Surg.*, 26, 1.
Waters, E. G. (1946). *Amer. J. Obstet. Gynec.*, 52, 478. Quoted by Macnab and Menzies (1950).