from within the tympanum had displaced the flap, leaving a small aperture on one side, and through this aperture blood was escaping.

Systemic treatment with penicillin, 500,000 units eighthourly, was given to protect the ears from possible infection.

The following day the patient's history was taken. This revealed that he had suffered discharge from the ears from time to time up to the age of 7, when he had had his tonsils and adenoids removed. He had had no trouble in his ears since then, and his hearing was very good. An audiogram a fortnight later (September 10) revealed some decrease in the hearing of both ears.

He made a satisfactory recovery. Both tympanic membranes healed completely; and the patient's opinion is that he can hear as well as before the operation. An audiogram taken four months later was the same as before.

#### COMMENT

It would appear that in this form of semi-open circuit there is a danger of compressing the air within the mouth and pharynx so that, with widely patent Eustachian tubes and thin atrophic drum membranes, the increased pressure within the tympanum may rupture the drum membrane. This is what seems to have occurred in this case.

I wish to thank Mr. G. E. Archer for his encouragement and advice.

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# Ileo-colic Intussusception in an Adult

This is the case report of a submucous lipoma of ileum which presented as an intussusception. This rare small-bowel tumour was associated with multiple subcutaneous lipomata, of which there was a familial history.

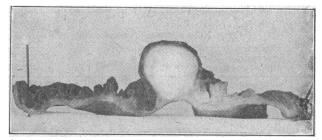
Raiford (1932) found only 88 instances of tumours of the small intestine in 11,500 necropsies and 45,000 surgical specimens examined at Johns Hopkins Hospital. Adenoma and leiomyoma are the commonest small-bowel tumours; fibroma, lipoma, angioma, and neurofibroma are much more rare (Comfort, 1931; Moore, 1944). Comfort discussed alimentary tract lipomata and described 65 submucous lipomata of small intestine, 34 of which produced clinical effects, which in 28 instances were due to intussusception.

# CASE REPORT

A man aged 56 was admitted into hospital on January 5, 1953, for investigation of mild central abdominal colic which had occurred an hour or two after meals for the previous three to four months. Physical examination on admission was negative apart from eight subcutaneous lipomata distributed over the flexor surfaces of both forearms and the extensor surface of the right thigh. The patient volunteered the information that his father had had a similar condition on the forearms. There were no features to suggest von Recklinghausen's disease. Twelve hours after admission he suddenly developed symptoms of acute intestinal obstruction with abdominal distension and tenderness and guarding in the right iliac fossa. The pulse rate rose steadily over four hours, and the radiograph of the abdomen taken with the patient in the vertical position showed a gas pattern and fluid levels suggestive of a distal small-bowel obstruction.

On laparotomy the cause of the obstruction was found to be an ileo-colic intussusception 12 in. (30 cm.) long, at the apex of which a polypoid growth could be felt through the caecal wall. The intussusception was reduced and the growth in the lower ileum examined; because of its size and the surrounding oedema the lumen appeared to be still occluded, so the loop bearing the tumour was resected and a side-to-side entero-enterostomy performed. The rest of the small bowel was inspected, but no other tumour found.

The patient was discharged from hospital two weeks after operation; when he was seen later as an out-patient his condition was entirely satisfactory. One of his subcutaneous tumours was excised and found to be histologically a simple lipoma. In the pathological report the resected ileum was described as containing a polyp 2 cm. in diameter which on microscopical examination was shown to be a simple submucous lipoma with an intense inflammatory change in the overlying mucosa (see Fig.).



Specimen of ileum, showing the submucous lipoma and the congested bowel proximal to it.

#### COMMENT

Most intussusceptions of the small bowel in adults are due to benign tumours; malignant growths are usually annular, and it is not mechanically possible for these to intussuscept. Because benign tumours of the small intestine are commonly polypoid in shape, an intussusception usually develops before the tumour has grown to a size sufficient to obstruct the passage of the fluid small-bowel contents.

This patient presented two clinical pictures often associated with small-bowel tumours. When he was admitted to hospital his symptoms were those of intermittent incomplete obstruction, as evidenced by colic after meals, due, it is thought, to temporary bolus obstruction. Subsequently he developed the acute ileo-colic intussusception which necessitated an emergency laparotomy. At laparotomy the tumour was resected after reduction of the intussusception because it appeared that the bowel would otherwise remain obstructed. Aird (1949) has advised against this, and suggested resecting the tumour at a second operation to avoid the use of partially devitalized bowel in the entero-enterostomy.

The occurrence of multiple lipomata among various members of a family has been previously described, and Willis (1948) believes there is a "heredo-familial predisposition." Although reported cases to support this view are scanty, Willis cites several instances reported by Adair et al. (1952), in particular the case of a 53-year-old woman with 16 discrete lipomata whose two sons and a grandson were similarly affected. In Comfort's large collected series of submucous alimentary lipomata no patient is described as having lipomata elsewhere. The association in the case presented may be a coincidence, but it would not be unreasonable to expect it to occur.

The patient was admitted under the care of Mr. A. J. C. Latchmore, and I would like to acknowledge his help and that of Dr. W. Goldie in the preparation of this paper.

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