cases to a surgical unit at the West Middlesex Hospital over a period of four years. There were 408 patients, of whom 118 had retention of urine and 20 had non-malignant intestinal obstruction other than by hernia incarceration. There was no case of acute intestinal obstruction due to compression by a distended bladder.

Surgical textbooks in common use—for example, Ian Aird (1958), Souttar and Goligher (1958), and Bailey and Love (1959)—do not mention compression obstruction of the large bowel by a distended bladder.

Because a previous reference to this condition could not be found, it was thought worth while to report this case. It is probable that in most patients with obstruction to the bladder outlet the distended bladder rises easily into the abdomen and does not compress the bowel to any great extent. Some degree of compression may, however, occur, and may be a contributory factor to the constipation that is often present in elderly patients admitted with retention of urine.

In the above case the small size of the pelvic cavity caused the distended bladder to impact at the pelvic brim and compress the pelvirectal junction. This resulted in acute large-bowel obstruction.

I would like to thank Mr. E. B. Z. Masterman, under whose care this patient was treated, for his encouragement and advice, and for permission to report the case; Dr. A. H. Morris and the staff of the *x*-ray department for the *x*-ray films; the staff of the photographic department for the photographs of the films; and the housemen and nursing staff for their help in treating the patient.

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Cowpox Treated with Marboran (Methisazone)

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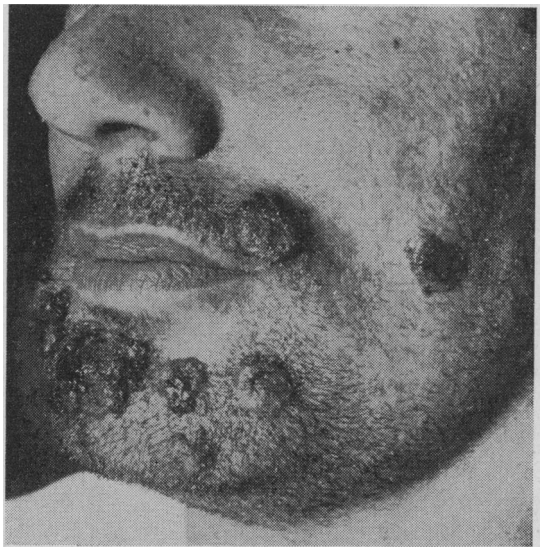
As cowpox in this country is now a rare disease in man the following case is worth reporting.

CASE REPORT

On 10 October 1964 a man aged 28 felt dizzy and complained of nausea and lassitude. On the 13th swellings appeared on the face and became more pronounced until 21 October, when he presented himself to one of us (H. T. H. W.) at the out-patient department of the Central Middlesex Hospital, after which he was admitted to Neasden Hospital (W. F. T. McM.) for investigation.

On examination he had lesions distributed mainly on the chin, but also on the upper lip and cheek. They consisted of thickened crusts with margins of yellow pus and some surrounding erythema (see Photograph). The photograph was taken on the 17th day of disease—that is, 14th day of eruption—when the pustular element was subsiding. He had slight faucial injection, was afebrile and did not feel ill.



Photograph taken on the 17th day of disease—that is, the 14th day of eruption—when the pustular element was subsiding.

Laboratory investigations showed: W.B.C. 9,000 (32% neutrophils, 66% lymphocytes, 2% monocytes). Throat culture: *Candida albicans* in moderate numbers. Crusts: sensitive *Staphylococcus aureus* was cultured. No growth of virus on HeLa cell culture. Gel diffusion test: positives to variola-vaccinia group. Egg culture: cowpox virus isolated.

On 23 October treatment with tetracycline, 250 mg. six-hourly for five days, was instituted to control staphylococcal infection. At the same time, the diagnosis of cowpox having been confirmed, a drug that was being tried in smallpox contacts for the prophylaxis of that disease—Marboran (methisazone; *N*-methyl-isatin β-thiosemicarbazone; B.W.33T57) was administered forthwith—in a dosage of 200 mg./kg.—that is, 14 g.—dispensed in syrup, followed by 50 mg./kg.—that is, 3.5 g. six-hourly for eight doses. On 24 October, having taken the drug, the patient vomited several times during the night. On the 25th he was still nauseated, and vomited twice following administration of the drug during the night. On the 26th nausea and vomiting stopped with cessation of the drug. The lesions were now drying up. Thick crusting was marked, and the purulent element had disappeared.

He was discharged, with the crusts separated and in good general condition, on 24 November.

COMMENT

The patient's occupation was that of a machinist, and had no connexion with wool, hides, or cattle. Upon inquiry it was found that he had been vaccinated against smallpox in childhood—one small scar was seen.

On 4 October he visited a promontory on the South Coast where some calves were grazing. He offered a calf an apple, which it sniffed, and which he threw away. The patient then tried to push the calf into position so that his friend could take a photograph.

His custom had been to shave with an electric razor, but, because they were youth-hostelling and no electricity supply was available, he had a very close shave that morning with his friend's safety-razor.

It is presumed that he applied his infected hand to his chin, so inoculating himself with cowpox virus after contamination from the animal.

This case shows how cowpox in man may be a mild though incapacitating disease, especially when, as in this case, the patient had been vaccinated in childhood.

In view of the late stage at which the patient came under our care, and the fact that the timing of the nausea and vomiting coincided with the period of administration of the drug, we cannot draw any firm conclusion from this case, except that Marboran appeared to irritate the gastric mucosa, so causing vomiting and lack of adequate absorption of the drug. It is true to say that the crusts started drying up and the purulent periphery subsided, but it may be that this was partly influenced by control of secondary staphylococcal infection with tetracycline.

Our thanks are expressed to Drs. A. D. Macrae and R. C. J. James, of the Public Health Laboratory Service, Colindale, for the laboratory investigations; to Messrs. Burroughs Wellcome for supplying the Marboran; and to Mr. A. Booker for the photograph.

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Haemophilus influenzae Infection of a Finger

Brit. med. J., 1965, **1**, 1042

The following unusual case of finger infection may be found of interest.

Case Report

A 2-year-old girl trapped her right index finger in a door on 6 October 1964. There was no significant damage to the skin, but two days later the finger became red and swollen. Her family doctor gave her oral penicillin for the next four days. As the finger was still swollen she was referred to hospital on 12 October. By this time the dorsal aspect of the affected finger was occupied by a well-circumscribed fluctuant swelling that extended from half-way along the proximal phalanx to the distal interphalangeal joint. A transverse dorsal incision through the skin just proximal to the proximal interphalangeal joint released about 0.5 ml. of greyish-yellow pus. A wick drain was inserted into the abscess cavity. When this was removed on 16 October there was a further release of pus, and at this stage she was again treated with oral penicillin for five days. The wound healed satisfactorily during the next week, but on 27 October the proximal interphalangeal joint was still swollen, and *x*-ray examination revealed evidence of septic arthritis of this joint. She was given oral ampicillin for five days, and by 18 November the finger was normal apart from some stiffness of the affected joint.

Bacteriology.—No organisms were seen in smears of the pus obtained when the finger was incised, but culture on blood agar yielded a pure growth of tiny colonies. These were found to consist of capsulate *Haemophilus influenzae* belonging to Pittman's type b. This organism was sensitive to benzylpenicillin and to ampicillin, as tested by a routine plate-disk method. *H. influenzae* type b was also grown from pernasal and throat swabs collected from the child on 21 October. Serum samples collected 13 days and 30 days after the original injury were tested for antibodies to *H. influenzae* type b capsular antigen by the method of Turk and Green (1964); a titre of 1:4 was obtained for each sample.

Comment

Isolation of *H. influenzae* from septic lesions of fingers has been reported before, by Rogers, Zinnemann, and Foster (1960), but in each of their three cases the lesion was a paronychia, the *H. influenzae* was non-capsulate (as are the great majority of respiratory-tract strains), and *Staphylococcus aureus* or haemolytic streptococci, or both, were also present. Two of their patients were finger-suckers, and it seems probable that in each case a primarily staphylococcal or streptococcal paronychia had become secondarily infected with commensal haemophili from the patient's throat. The *H. influenzae* strain from our patient was the only organism found in the pus and it belonged to type b; this type is responsible for virtually all cases of haemophilus meningitis and can also cause various other acute purulent conditions, including septic arthritis (Dyer, Romansky, and Holmes, 1958; Rogers *et al.*, 1960). In retrospect it seems probable that the lesion in our patient's finger was primarily a septic arthritis, the organism having come from the nasopharynx via the blood-stream. Haemophilus arthritis of an interphalangeal joint is unusual, all previously reported cases having involved only large joints.

There was only a low titre of antibodies for *H. influenzae* type b capsular substance in each of the serum samples, and this suggests that the child had not carried the organism in her respiratory tract for long before she injured her finger. It is possible that bacteraemia commonly accompanies colonization of the nasopharynx of a child by *H. influenzae* type b but is usually symptomless unless there is some local lowering of resistance to infection, such as was provided in this child by the trauma to her finger. This suggestion accords well with many of the facts about the incidence of haemophilus meningitis, which affects only occasional individuals among the many young children who at some time become infected with *H. influenzae* type b (Turk, 1963).

We wish to underline the fact that this organism could easily have escaped detection during routine examination of the pus from the finger. Because *H. influenzae* is not expected from such a specimen, it may well not be afforded a chance to grow or may not be correctly identified if it does so.

We are indebted to Mr. A. N. Smith, A.I.M.L.T., for correct preliminary identification of the organism in the present case. We are also indebted to Mr. J. R. G. Edwards, who saw the child on several occasions on which she attended the hospital.

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