2 and 3 were transferred from Finchley Memorial Hospital, where the operating theatre was temporarily out of commission.

Discussion

The post-mortem examination in Case 2 showed that there had been no attempt at healing of the gastro-duodenal anastomosis, which was surrounded by a band of necrosis 1 cm. wide, involving both the duodenum and the stomach. The actual leak was not at the anastomosis, but in the necrotic suture line which had closed off the redundant lesser curve moiety of the gastric incision. The catgut sutures were easily identifiable and were intact.

These findings were regarded as of some importance, and were thought to be related to the patient's age and to the fact that she had received 9½ pints (5.4 litres) of stored blood. It is of interest that a similar case occurred recently in the same hospital. In this instance a man aged 61 underwent partial gastrectomy of the Polya type for gastro-duodenal haemorrhage. He had been desperately ill, and had received 12 pints (6.8 litres) of stored blood. General peritonitis supervened after the lapse of a few days, and a secondary operation revealed almost complete dehiscence of the anastomosis, which in this case had been fashioned with thread sutures. There was also some evidence of delayed healing, in the shape of threatened disruption of the wound, in Case 3.

This aspect of the matter was discussed at length with Dr. Royston, and it was agreed that elderly patients should be submitted to operation as soon as their condition permitted, and before they had received the equivalent of a replacement transfusion of stored blood. The part which vitamin C plays in wound healing is not understood fully, but it may be of significance that Case 3 had received 7 g. of vitamin C (added to the pre-operative blood transfusion in the proportion of 1 g. to the pint), whereas Case 2 had received only 2 g.

The knowledge that fatal haemorrhage can occur from a stomach which is outwardly unblemished does not absolve one from the duty of carrying out a careful laparotomy whenever the possibility of a lower lesion exists—for example, where there has been melaena but no haematemesis. The following case, operated on during the seven-weeks period mentioned above, is a bizarre reminder of the need for caution before proceeding to gastrectomy.

Mrs. X, aged 64, was admitted under the care of Dr. Royston with clinical features suggesting either mild cholecystitis or appendicitis. Whilst under observation she had a massive melaena. At laparotomy the stomach and duodenum appeared normal, but a small mass could be felt in the ascending colon. The colon was full of blood, but there was none proximal to the ileo-caecal valve. The mass showed signs of recent inflammation, and was thought to be a solitary diverticulum, but, as carcinoma could not be excluded, right hemicolectomy was performed. Recovery was uneventful except for superficial thrombophlebitis of the left leg. Subsequent examination of the specimen showed that an inflamed solitary diverticulum consisting of mucous membrane and its muscularis had penetrated the main muscle coat, and had eroded a large artery lying immediately external to its deepest point. A post-operative barium enema showed no evidence of diverticulosis in the remaining colon. I cannot find any record of a similar case in the literature.

Summary

Six cases of massive haemorrhage from acute gastric ulceration are described, together with a contrasting and unusual case of diverticulitis of the ascending colon.

It is suggested, not without a qualm of misgiving at the extent of the operation as compared with that of the lesion, that wide gastric resection should be the operation of election, and that the interference with wound healing which may follow massive transfusion of stored blood is an additional argument in favour of early operation on elderly patients.

I am grateful to Dr. Royston and Dr. Bruce Williamson for entrusting me with the surgical care of these patients, and to Dr. Ronald Welch for his reports on the necropsies on Cases 1 and 2, and his report on the histopathology of the colonic diverticulum.

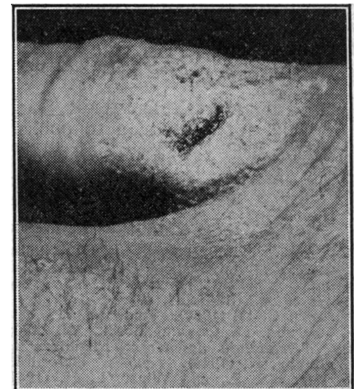
Medical Memoranda

Norwegian Scabies

During the past 50 years there have been only a few reports of the occurrence of Norwegian, or crusted, scabies in English-speaking countries: in England Calnan (1950) described four cases seen in a mental defectives' institute, Beatty (1913, 1915) saw two cases in Dublin, and two more have been reported in the American literature (Anderson and Stout, 1940; Sweitzer and Winer, 1941). It was first described by Danielssen and Boeck (1848) in leprous patients, and has since been a subject much discussed by European dermatologists. I recently saw the following case at the Royal Infirmary, Sheffield.

Case Report

A railway plate-layer aged 55, of average intelligence and maintaining, from his appearance, a moderately high standard of personal hygiene, complained of an eruption over the whole body of one month's duration. Itching was only slight in degree, but was worse at night. He gave no previous history of any skin disease. He was living with a family of daughters and grand-children, and always slept by himself. The family have a cat, but he had otherwise no close contact with animals.



Lesion on finger.

On examination he showed bluish friable hyperkeratotic plaques on the fingers (see illustration), wrists, elbows, over the thyroid cartilage, tips of the ears, buttocks, thighs, and soles of the feet. The axillary folds were studded with large papules. Burrows were noticed on the penis and, on closer examination, also on the fingers and wrists. A live acarid was removed from one of the burrows and the diagnosis of scabies confirmed. The hyperkeratotic lesions were scraped with a curette and the scales examined microscopically; these revealed large numbers of acarids of all sizes in a state of great activity and resembling in every way Mellanby's pictures (1943). Physical examination, including detailed examination of the nervous system, showed no other abnormality.

The routine treatment by baths and benzyl benzoate emulsion for two days was prescribed, and 11 days later the patient's skin was clear except for some residual hyperkeratosis of the soles, which responded in a few days to a 5% salicylic acid ointment. A month later the skin was completely normal. At that time, some three months after the onset, there were still no reports of further cases in the family.

Comment

The name crusted scabies is preferred by many to Norwegian scabies, but it may cause confusion by suggesting an impetiginous form of eruption. Histological reports in

previous papers refer to hyperkeratosis and parakeratosis rather than dried serum. The lesions in this case appeared to be friable hyperkeratoses to the naked eye.

The clinical picture is undoubtedly due to the unusually large population of acarids, which must have been several thousands in this patient, compared with the average of 11.3 found by Mellanby. There are two possible explanations for this.

1. The acarid differs in some ways from the usual one. Toomey (1922) was of the opinion that the disease was caused by *Sarcoptes elephantiacus* and was of animal origin. Examination in this case showed an acarid anatomically identical with *Sarcoptes scabiei hominis,* but, as Mellanby says, many animal acarids appear to be identical but have different habits. Calnan's cases seem to have been introduced into a ward by a boy with crusted scabies, and, although three other cases occurred, the rest of the inmates developed the ordinary infection. At the same time it must be admitted that the occurrence of four cases of this rare condition in one institution was unusual. Might it be that *Sarcoptes scabiei hominis* does on occasion develop new habits and that a crossed infection is therefore more likely to be shown clinically in this unusual form?

2. The patient himself is unusual in his response. (*a*) Owing to poor personal hygiene, mental deficiency, etc., the acarids continue to reproduce unhindered. This does not appear to be the case here. (*b*) The usual method of removing the acarids by scratching is at fault owing to sensory loss or an unusually poor response to their presence. Mellanby has shown that it takes four or more weeks after burrows become visible for the itching to begin, and he is of the opinion that this is due to sensitization of the body to the acarids. It would seem possible that the cause of this unusual picture might be that the patient failed to become sensitized, failed to remove the acarids by scratching, and therefore developed a population so great that the usual burrows were replaced by veritable warrens.

I wish to thank Dr. H. R. Vickers, of the Royal Infirmary, Sheffield, for permission to publish this case.

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Fixed Eruption due to Sulphonamide Hypersensitivity

"Fixed drug eruption" is a rare but interesting sensitization reaction characterized by rapid development of one or more circumscribed erythematous plaques over the body (skin and mucous membrane) following systemic administration of certain drugs. The eruptions disappear completely, often leaving some residual pigmentation, and recur on the identical sites if the offending drug is administered again—that is, the sites are fixed for the eruptions to recur, and hence the term "fixed eruption." Phenazone, phenacetin, amidopyrine, barbiturates, quinine, sulphonamides, arsphenamines, and phenolphthalein are apt to produce fixed eruptions, though, of course, on very rare occasions. A case of fixed eruption has recently been reported following the use of tetraethylthiuram disulphide ("antabuse") in the treatment of chronic alcoholism. As sulphonamides are often used, either alone or in combination with some antibiotics, and in view of the rarity with which fixed eruptions occur after their use, the following case is of interest.

Case Report

The patient, a male student aged 20, had a gluteal abscess close to the anus and some associated lung trouble (acute bronchitis) in July, 1950. Apart from the usual local treatment for abscess, he was advised to take sulphathiazole, 1 g. ("cibazol," two tablets) four times daily. Within three to four hours after the first dose, which he took in the evening, he experienced some itching sensation in his lips as well as over some localized areas in the abdomen and medial border of the right foot. Next morning he noticed some swelling of the lips and surrounding the anus and external urethral meatus, along with three erythematous plaques—one of about 1¼ in. (3 cm.) in diameter over the left hypochondrium and two over the medial border of the right foot; one of the latter was about 1 in. (2.5 cm.) and the other about ¼ in. (0.6 cm.) in diameter. There was much itching over these areas. The drug was stopped immediately and the patient given antazoline ("antistine"), two tablets thrice daily for the first day and then one tablet thrice daily for the next two days. All the symptoms subsided in about five days, leaving a dark spot of about 1 in. (2.5 cm.) in diameter in the left hypochondrium, and a less dark spot of about ½ in. (1.3 cm.) in diameter and a red spot of about ¼ in. (0.6 cm.) in diameter—that is, original erythema—both in the medial border of the right foot.

In the third week of September he took two tablets of sulphadiazine (1 g.) for the same lung trouble. About half an hour later he experienced itching of the lips and also of the residual spots in the abdomen and right foot. Subsequently his lips swelled up and erythema of identical nature and in identical areas occurred as previously. The drug was stopped immediately and the symptoms subsided in about two days, leaving only the same residual spots.

On August 25, 1951, he had an attack of acute bronchitis, for which he was given "sulphatriad," 1 g. thrice daily. About 20 minutes later he experienced an itching sensation in his lips and around the anal and urethral orifices, which swelled up rapidly. Erythema of similar nature and in the same spots over the abdomen and right foot again occurred. The drug was withheld and all symptoms subsided in about three days, leaving the residual spots once again in their previous sites. Recourse was had to penicillin, which was given intramuscularly without any further reactions.

Comment

Sulphonamide hypersensitivity is not very uncommon, the usual hypersensitivity reactions being drug fever and drug eruptions of urticarial and maculo-papular types; but a strictly localized sensitivity reaction of the nature of fixed drug eruption is rare. The characteristic feature of the above case is recurrence of cutaneous manifestations of identical nature and in identical sites following each dose of sulphonamide. Another feature is that whatever sulphonamide compounds were used the same reactions were reproduced every time—that is, hypersensitiveness was developed against all sulphonamide compounds. In this connexion Lehr's (1950) observation is of practical value. He observed that the higher the concentration of any individual sulphonamide in the body the greater was the chance of developing hypersensitivity. He showed that sensitization was most unlikely to occur with dosage of less than 2 g. of any individual sulphonamide daily (with blood levels of less than 5 mg. per 100 ml.). A combination of different sulphonamides (like sulphadiazine, sulphathiazole, and sulphamerazine) produces its optimum effect without giving rise to a high enough concentration of any of the individual compounds to develop hypersensitivity. The administration of sulphonamides would have been possible in my case if a combination such as sulphatriad had been used at the very outset. However, a number of effective antibiotics are now available to combat bacterial invasions safely.

M. N. Ghosh, M.B., B.S.

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