concurrently with exposure to infection through the blood of an individual known to have been in the bacteraemic stage of the disease.

Summary

A case of brucellosis diagnosed 13 weeks after transfusion with blood from a donor in the bacteraemic stage of the disease is described. If accepted, it is the first time that such an infection has been reported in this country, but such cases have been confirmed in Mexico.

Its occurrence illustrates the importance of questioning prospective donors about their health and rejecting those who might be in the incubation stage of an infectious disease.

The insidious onset of symptoms in undulant fever and the delay which may occur in the development of the antibody response are demonstrated.

I would like to express my thanks to Sir Weldon Dalrymple Champneys and to Professor Robert Cruickshank for their interest in this case; to Mr. Geoffrey Harvey, M.R.C.V.S., for investigating the patient's milk supply; to Dr. G. H. Tovey, of the Regional Transfusion Centre; and to the donor's medical attendant, Dr. R. C. Clifford, of Portishead, for his helpful notes. My thanks are also due to Dr. C. T. Andrews, physician to the West Cornwall Clinical Area, for permission to publish this case.

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Medical Memoranda

Lactation from Axillary Tail of Breast

Studying the literature on polymastia, which is taken to include supernumerary breasts, polythelia, and accessory aberrant or ectopic breast tissue in any form or situation outside the normal gland, one is impressed by the universal complaint of those few authors who have interested themselves in these interesting developmental anomalies that the subject has been somewhat neglected by medical writers.

In view of the relative rarity and the paucity of recorded cases, it was thought worth while publishing the following case, especially as no record of an identical one could be found, that of Anderson (1930) being closest in similarity.

CASE REPORT

A 25-year-old primigravida was on October 1, 1953, delivered normally at term of a live female infant weighing 7 lb. 2 oz. (3.2 kg.). On October 4 both breasts were engorged and tender. With expression, they were improved by the next day, but the patient became aware of moisture running down from the right armpit. On closer inspection this proved to be milk, and she was found to have bilateral moderately tender axillary breasts continuous with the main organs. Gentle pressure over the right-sided one caused milk to exude from a skin pore. The swellings were in the situation and relation of the axillary tails of Spence. The one on the left was of the same consistency but slightly smaller, and from it no milk could be expressed through the skin. There was no vestige of nipple or areola related to either swelling or elsewhere in the "milk line." The main breasts were normal, and satisfactory feeding was soon established, with subsidence of engorgement of the axillary tails. These had at no time caused gross discomfort.

Upon discharge from hospital on October 10, the axillary swellings were about half the size initially observed, and

non-tender. Milk could still be expressed from the one on the right, but no longer ran out spontaneously. The infant had regained its birth weight. The patient was seen again on October 21, when the findings were the same as on the day of discharge.

Her mother, who has five children, had not been able to feed any of them, lactation failing in each case at the end of the lying-in period. She has no form of polymastia.

The patient has one sister, aged 24. She attended the antenatal clinic on October 27, when she was about 10 weeks pregnant, expecting her first child, and was found to have a unilateral swelling in the left axilla in the same situation as that of her sister. It was of the same consistency as the main breasts, but with no palpable communication with the one on that side, which was decidedly smaller than the right breast. On the right she has two rudimentary nipples in the "milk line," 3 in. (7.5 cm.) above and below the nipple of the main breast respectively.

COMMENT

Cases of axillary breast previously reported in which milk secretion occurred through a skin pore differ from the above case in that no connexion with the main breast was described (Anderson, 1930; Storey, 1936; de Cholnoky, 1939, 1951). More commonly, cases have been reported in which no milk-secreting duct opened on the surface of axillary breast tissue (Anderson, 1930; Christie, 1938; de Cholnoky, 1939, 1951; Masor, 1952). Some of these had been shown to communicate with the main breast by an isthmus of mammary tissue, others not. Most of these swellings had presented for the first time in the puerperium with the establishment of lactation, and most were very uncomfortable to the patient. De Cholnoky noticed that subjective complaint is much less where there is a connexion with the breast, as the secretion is discharged to and through the normal channels. None of the cases described, however, in which a communication with the main breast could be demonstrated, had milk coming through a skin pore over the axillary swelling.

In order that the presence of axillary breast tissue should not be missed, perhaps a suggestion that the best time to look for it is at or before the first post-natal examination would not be out of place. Storey's criteria are most useful.

I am indebted to Mr. C. W. F. Burnett, under whose care this patient was, for permission to publish the case report.

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Case of Kaposi's Varicelliform Eruption (Accidental Vaccinia)

The following case shows the possibility of accidental vaccinia in a mother from contact with her vaccinated baby.

CASE REPORT

A 10-months-old child was vaccinated on April 2, 1953, in the upper and outer part of the thigh. This was successful, and the usual reaction followed. On April 18 the mother, who had never been vaccinated, developed a papule on the lower part of the left cheek and a sore in the left nostril in the naso-facial angle. A papule appeared on the following day on the posterior aspect of the terminal phalanx of the left index finger and also one on the interscapular part of the back. On April 22 the papules became pustular and there was a tendency towards umbilication. Considerable left infraorbital oedema developed with sub-maxillary adenitis. The temperature rose to 101.4° F. (38.6° C.) and the patient felt ill generally. As there had been several cases of smallpox in the North, a suspicion

arose about this case, and the medical officer of health was informed about it on April 23. A complement-fixation test of the pustular content was negative for vaccinia.

Dr. J. P. Marsden, Home Office Consultant, who saw the patient on April 24, was of the opinion that this was a case of accidental vaccinia, which he thought was rather rare. The accompanying photograph, taken on the same day, shows the typical appearance of the lesions and the facial oedema. A repeat complement-fixation test on egg membrane on April 27 proved positive for vaccinia, and so was

Photograph showing typical appearance of lesions.

an egg culture. Crusts began to form on the pustules on the 27th and the oedema was beginning to subside. The crusts separated about a week later, and small slightly depressed scars were left on the cheek and nostril.

This was a definite case of Kaposi's varicelliform eruption, as it fulfils the two requirements: (1) it was acquired by contact with a vaccinated person, and (2) it was definitely due to vaccinia virus, as proved by the complement-fixation test and egg culture.

COMMENT

Considering the large number of vaccinations performed, the number of reported cases of accidental vaccinia is comparatively very small; and although this case ran a benign course, the possibility of serious complications and sometimes of a fatal issue should be borne in mind. Finn *et al.* (1952) report a case of accidental generalized vaccinia in a child 6 months old, contracted from another child admitted thirteen hours previously into a cot adjacent to the patient's and who had had an active vaccination sore for ten days. The patient developed lesions twelve days later and died after ten days, in spite of treatment. Good and MacLachlan (1950) report a case of accidental generalized vaccinia in a boy of 6, who played in bed with a recently vaccinated infant; the boy died in hospital nine days later from vaccinia.

Vaccinia may also develop in a person who has been vaccinated, as illustrated in a case reported by Blattner (1951) of a child who developed impetiginous lesions after a smallpox vaccination. Vaccinia changes were demonstrated in the material taken from the lesions fifteen days after vaccination. According to Blattner *et al.* (1946), humoral antibodies to vaccinia begin to appear at the end of the first week following cutaneous vaccination; they increase in amount during the second and third weeks and reach their maximum at the end of the third week.

Bigler and Slotkowski (1951) maintain that the microscopical changes in vaccinia are identical with those of variola. It is believed that vaccinia and variola are caused by the same virus. When variola is inoculated into cattle and carried through several transfers in these animals the virus (variola) becomes attenuated and approaches the nature of vaccinia. The changes in the Malpighian layer of the epidermis consist of swelling, cytoplasmic degeneration and liquefaction, formation of multilocular vesicles, and eosinophilic inclusion bodies—Guarnieri's bodies—which are swollen nucleoli that have migrated from the nucleus into the cytoplasm.

It would therefore seem advisable to issue warnings about the possibility of accidental vaccinia from undue contact with recently vaccinated persons. The risk appears to be greater in people who have never been vaccinated.

I would like to express my thanks to Dr. J. P. Marsden, consultant, Joyce Green Hospital, for his kind help and advice about the case, and to Dr. J. C. Birchall, assistant medical officer of health for Croydon, for his great interest in the case and for the repeated complement-fixation tests and cultures done through him in the virus laboratories.

A. FRY, M.R.C.S., L.R.C.P., D.M.R.

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Torsion of Gall-bladder

Torsion of the gall-bladder is a relatively rare emergency, which can occur only in those cases in which the gall-bladder is suspended from the liver by a mesentery. Bean and Symond (1953), in a review of the literature, found 100 cases reported up to 1953. The first case was reported by Wendel in 1898. In his case there was a floating gall-bladder, with a long cystic duct, and a floating kidney, with cholelithiasis and perforation of the gall-bladder. Brewer (1899), in 100 consecutive dissections, found only five cases in which the gall-bladder had a mesentery. A mesentery is only one of the several possible congenital anomalies of the gall-bladder. Recht (1952) reported a case in which he found a double gall-bladder, one part of which had undergone torsion. According to Maingot (1948) most cases of torsion occur during later life—that is, at the age of 60–70. Short and Paul (1934) estimated that 84% of cases occur in females. A further case is here presented.

CASE REPORT

On admission the patient, a woman aged 71, complained of severe abdominal pain, mostly in the upper part and down the right side of the abdomen. She stated that the pain had started in her neck, and seemed to pass down her chest to settle in her stomach. She had vomited several times prior to admission. There were no other symptoms of note. Her own doctor had diagnosed angina pectoris. She stated that for the past two years she had had severe breathlessness on slight exertion.

On examination she was noted to be a frail, thin, ill-looking old lady, obviously in severe pain. She was edentulous. The tongue was clean and moist. No abnormal physical signs were detected on examination of her chest, apart from the fact that the apex beat was $1\frac{1}{2}$ in. (3.8 cm.) outside the nipple line. There was no abdominal distension; only slight movement with respiration was noted, and the abdomen was rigid down the right side, where it was also very tender. A distinct zone of maximal tenderness was noted about $1\frac{1}{2}$ in. (3.8 cm.) above and to the right of the umbilicus, this area being approximately 1 in. (2.5 cm.) in diameter. No mass could be felt and no loss of liver dullness was detected. Her temperature was 99° F. (37.2° C.), pulse 95 and regular, and blood pressure 290/120.

A provisional diagnosis of perforated duodenal ulcer was made and the patient prepared for operation.

A laparotomy was performed through a right upper paramedian incision. When the peritoneum was opened a pyriform black mass presented, which, on further inspection, was found to be a gangrenous gall-bladder. The gall-bladder was suspended from the liver by a mesentery and had undergone torsion in an anticlockwise direction. The mesentery extended from near the fundus to the proximal part of the cystic duct and was $\frac{1}{2}$ in. (1.3 cm.) across its widest part. The torsion involved the proximal half of the cystic duct, which was longer than usual. The gall-bladder was easily removed after the cystic duct and artery had been identified