NOTES ON THREE CASES OF ALASTRIM.

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The following notes on this unusual disease may be of interest:

Case 1.—Private "S." was admitted to hospital on May 25 complaining of severe headache, and slight pain in the lumbar region, temperature 103° F., pulse 84. He stated he had not felt well for two days previous to his admission to hospital. On examination a few papules were present over both sterno-mastoid regions of the neck, and also on the back of the wrists. The skin on the rest of the body presented nothing abnormal. The tongue was thickly coated and the bowels were constipated. The patient had been vaccinated three years ago, and bore good vaccinia marks. May 26, 1920: The neck, upper part of the back and the forearms up to the elbow were covered with small discrete papules, showing no inflammatory zone. Temperature 102° F. Pulse 80. The majority of the papules of May 25 had become vesicular, and were somewhat irregular in size, with a marked tendency to become confluent. 27th: A crop of vesicles appeared all over the body, including the scalp, the greater number becoming confluent on the buttocks and gluteal regions. The soles of the feet and palms of the hands were free from any signs of the eruption. 29th: The earliest papules had now passed through the vesicular stage and had become somewhat contracted, dark and pustular.

June 1: The body was now covered with pustules, a few papules and vesicles still remaining on the chest and upper part of the back. Temperature 99° F. Pulse 88. 3rd: The skin was covered throughout with pustules, a few vesicles were still present about the neck. Temperature 99·6° F. Pulse 86. Bowels only moved with aperients, tongue coated, appetite very good, patient stated he felt very well, 5th: Some of the pustules have become smaller and darker, and a few show early scab formation, particularly on the chest, back and buttocks. Temperature 99·8° F. Pulse 88. 7th: Many of the pustules on the chest, back and buttocks have become dark and dry, but no signs of umbilication are demonstrable. Temperature 98·6° F. Pulse 74. 9th: The cutaneous system shows but a few pustules, and is covered with small discrete scab formations, many of which have become confluent on the buttocks and gluteal regions. Temperature and pulse normal. 12th: The scabs remain, but a few have fallen off about the chest, leaving a dark zone but no marked scarring. The patient feels perfectly well, his tongue is clean, bowels acting normally, appetite good, temperature and pulse normal. 15th: Most of the scabs on the chest, back and buttocks have dropped off, leaving practically no scar formation. 17th: The skin is almost clear of any scab formations, with the exception of the axillary regions where a few
Clinical and other Notes

scabs still remain. 20th: The skin is clear of all scabs, and shows a slight reddish mottling, without scar formation.

Case 2.—Private "W." was admitted to hospital on July 26, 1920, complaining of "fever" and pain in the back. On examination the neck was covered with small raised papules, which could not be seen on any other part of the body. The tongue was furred, and the bowels had not moved for two days; a few papules were present on the buccal mucous membrane. Temperature 102.5°F. Pulse 90. Patient stated that he felt weak, and could not take his food for the three days previous to coming to hospital. He had been successfully vaccinated eighteen months ago. July 27: Most of the papules on the neck had become clear and vesicular, a number of new papules appeared on the chest and back. Temperature 100°F. Pulse 86. The palms of the hands and the soles of the feet were free from any signs of eruption. 28th: No new papules have appeared on the body, the old ones have almost all become vesicular. 29th: The vesicles are still present but slightly enlarged and darker in colour: no further appearance of any fresh vesicles can be seen. 31st: Many of the vesicles have become yellow and pustular. Temperature 99.8°F. Pulse 90. August 2: Most of the vesicles have passed into the pustular stage, a few vesicles still remaining about the axillary folds. Temperature 100.2°F. Pulse 96. 4th: Many of the pustules have become contracted and appear to be drying. 5th: The majority of the pustules show signs of scab formation. 7th: Drying of the pustules and scab formations present throughout the whole cutaneous system. 10th: Many of the scabs on the neck have dropped off, leaving small reddish zones, but no scar formation. 14th: The scabs have completely disappeared, leaving a reddish mottling. Patient states he feels perfectly well. This patient was re-vaccinated during the attack and completely failed to take.

Case 3.—Private "L" was admitted to hospital on July 31, 1920, complaining of severe headache, sore throat, loss of appetite, furred tongue and constipation. On examination the tonsils appeared to be hyperemic. The cutaneous system showed a few pustules over the region of the manubrium sternum, and on the anterior surface of the elbow joints. Patient was successfully vaccinated one year ago. August 2, 1920: The chest and upper part of the back are covered with papules. Temperature 99.8°F. Pulse 88. 4th: Several vesicles present over the clavicular and sternal regions, and over the upper part of the back. 5th: Almost all the papules have become vesicles, and a few of the vesicles about the root of the neck show signs of early pus formation. 8th: Nearly all the vesicles have become pustular. Temperature 100.4°F. Pulse 98. 10th: Many of the pustules have become dry, and somewhat raised, but no umbilation or itching is present. 13th: The great majority of the pustules have undergone scab formation, a few still remaining in the pustular stage in the axillary regions. 16th: All the pustules have disappeared, nothing but dried scabs are to be seen, many of which have dropped off. 20th: Many of the scabs have dropped off, leaving small raised hyperemic areas, but no scarring or loss of tissue is to be seen. 24th: The scabs have completely disappeared, and the patient states he feels perfectly well. This patient was vaccinated during the attack; but completely failed to take.

The cases of which the above notes are given occurred in Jamaica, where an epidemic now prevails amongst the civil population. The disease has many
Clinical and other Notes

synonyms and is often spoken of as Amaas or Kaffir milk-pox in South Africa. It is an acute specific exanthema bearing a close resemblance to smallpox in its clinical signs, but its symptoms are much milder, and it might be considered to occupy middle place between variola and varicella.

One of the earliest accounts of the disease was given by Anderson, of an epidemic that occurred in Jamaica in 1866. Lasselle and Dickson described a similar outbreak in 1903. Schults has described the disease as occurring in Trinidad in 1903 and 1904. It has also been reported from South America and South Africa.

The etiology of the disease is unknown, and vaccination against smallpox does not seem to be protective against alastrim. The point to be settled is whether it is a true smallpox, a smallpox modified by vaccinal immunity, a varicella or a new disease.

Alastrim differs from smallpox in the following points:
(a) Vaccination against smallpox affords but slight protection from alastrim.
(b) The severe lumbar pain of smallpox is absent in alastrim.
(c) The secondary fever during the pustular period is very mild, and may be absent in alastrim.
(d) True umbilication of the scabs is not seen.
(e) The very mild form it takes in adolescents.
(f) Absence of scar formation.
(g) Low mortality rate—1.5 to 2 per cent.

Alastrim differs from chicken-pox in the following points:
(a) It occurs at all ages.
(b) The marked tendency of the vesicles to become confluent.
(c) The disease is liable to be prolonged in all its stages, and more particularly in the pustular stage, which may last as long as ten days.

The symptoms consist of headache, furred tongue, constipation, mild lumbar pain, fever and increased pulse rate. The papules appear when the temperature falls about the third day; when the appetite returns and the patient feels much better. Secondary fever during the pustular stage may be present from the eighth to the tenth day, but it may be mild or absent altogether. The rash is not seen on the palms of the hands or the soles of the feet, but it may be present all over the body including the scalp. Itching and glandular enlargement do not seem to occur.

THE FIELD AMBULANCE AND ITS ORGANIZATION.
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A field ambulance, as a unit, should be characterized by:

First, Elasticity.—The number of wounded and sick it may be required to look after varies from zero to infinity. It is only supposed to be equipped for 150 patients, but in times of stress this number will be multiplied many times over, our highest number of admissions being 1,250 in twenty-four hours.