EPITHELIOMA OF HAND AND GLANDS: REMOVAL OF TWO FINGERS AND THE GLANDS.

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It is a question how far the following case resembles those of soot, paraffin, and allied cancers. The man's occupation associates him with the distillation of coal, but the effect of the products, if any, in promoting the growth of epithelioma in his case is as mysterious and unexplained as that of soot in cases of chimney-sweep's cancer of the scrotum. Cases of this quality have often run a very mild course, and have enjoyed an immunity from return, after even repeated operations, that has rarely been equalled in epithelioma of the limbs unassociated with soot, paraffin, and coal.

A strong man, aged 54, caretaker and worker in the gas-works, Menai Bridge, North Wales, entered my ward at the Liverpool

Fig. 1.—May, 1903.

Royal Infirmary in May, 1903, for a painful ulcerated epithelioma of three years' duration on the back of his left hand, over the metacarpophalangeal joints of the fore and mid fingers (Fig. 1). It had started in the latter situation, had for months prevented him from working, and was found on probing to have eroded the bones and ligaments of that joint. The lymph glands at the elbow and in the axilla also were enlarged.

On May 27th the disease was removed by amputating the fore and middle fingers with half of each metacarpal bone. Pain ceased after the operation. Twelve days later the enlarged glands at the elbow and axilla were removed. All the wounds healed simply, and he went home after four weeks, resuming work, which continued for eight years.

In April, 1911, he came again to hospital for a rodent ulcer of the left temple near the eye. He was taken into Mr. Bickersteth's ward, where the growth was excised by Mr. F. Jeans on April 15th. After healing, x-ray treatment was applied to the scar

Fig. 2.—May, 1911.

Fig. 3.—May, 1911.

and neighbourhood for a few weeks. On my return after absence from home I was informed of his presence, and went to see him on May 15th. With the permission of my colleagues photographs were taken by Miss Irlen at the Royal Infirmary on May 16th, (Figs. 2 and 3), and he went home on May 20th.

He is deeply grateful for the preservation of his thumb and two fingers, with which he can perfectly do all that is required of his left hand. He has not lost a day's work in the interval of nearly eight years.

A section of the later growth has been made in the University laboratory, and reported on by Mr. Mackarell, pathological assistant. It shows in perfection a rodent structure of the variety containing small cell-nests. I much regret that no microscopical preparation or report of the disease in the hand and glands can be found.

Sequel.

Some months after this man's return home I learnt that he had not been there a week before he had to take to his bed on account of pain in the mid-dorsal spine with gradual loss of power and sensation in his lower limbs. It seems that his pain began even before he left home in April, but he never told me of it, and when he returned home again in May he expressed himself as strong and well. The paraplegia increased and became complete, though the pain lessened. In June fresh growth appeared at the seat of the rodent ulcer, and he died of exhaustion on July 11th, 1911. The diagnosis was that of "malignant deposit affecting the spinal meninges and the cord itself."

These particulars, sent to me by Dr. John Roberts of Menai Bridge, were obtained from the patient's medical attendant, Dr. J. M. Thomas of the same place, to both of whom I am indebted for the information.

The eventual fatality does not detract from the success obtained with the hand and glands of the upper limb, and I regard it as a very encouraging example of conservative practice.

ON ACUTE POLIOMYELITIS (HEINE-MEDIN'S DISEASE).*

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I wish to record a couple of cases of acute poliomyelitis, or Heine-Medin's disease, which illustrate two separate forms of the disease, that is, the spinal and ataxic types. I have not had the advantage—a questionable one from the patient's point of view—of studying the morbid anatomy of this disease, but from the researches of others it appears that we must take it: (1) That the lesions should no longer be considered as limited to the anterior cornua but are diffused throughout the central nervous system; (2) that so far bacteria have not been demonstrated; (3) although the bacillus of acute poliomyelitis has not been isolated, Flexner has shown that the virus or infective agent can pass through a Berkefeld filter, and the filtrate has subsequently infected monkeys, though the incubation period of monkeys was longer with a filtered than with an unfiltered virus, varying from five to twelve days; (4) the disease has been communicated by means of an emulsion made from the spinal cord of an acute case; (5) this infective agent has been shown to retain its virulence for a long time outside the organisms of animals, to be fairly sensitive to heat (twenty minutes at 50° C. destroying the virus) and insensitive to cold (a virulent emulsion kept at freezing point for eleven days did not lose its activity to any marked extent).

Now how does the virus penetrate? Flexner and Leiner¹ point out the probability of the naso-pharynx being the point of entry. They produced paralysis in monkeys by scarifying and then rubbing the nasal mucosa with the active virus, the disease appearing in from five to eleven days; but the faculty of penetration does not appear pronounced, as Levaditi² was unable to infect his monkeys either by painting the naso-pharynx or by placing plugs soaked in the virus in the nasal fossae. In cases of Heine-Medin's disease the nasal mucosa has been shown to contain a virus capable of transmitting the infection to animals. The virus has not been found in the urine, faeces, kidney, or intestinal mucosa.

Although epidemics were noted in Scandinavia as far back as 1881, Medin of Stockholm was the first to give precise information on the subject. He was followed by many other observers from many lands. The analysis of these epidemics shows: (1) They occur at the end of the summer and in the autumn. (2) Neither defective hygienic conditions, poverty, nor overcrowding favor the extension of the disease.

* Read before the Isle of Wight Division of the British Medical Association.