AN INTERESTING VARIANT OF BORNHOLM DISEASE

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In the course of an outbreak Bornholm disease may undergo metamorphosis.[1] The following may be an example, though I have no proof. Recently in my practice there were 11 cases, mostly school children, with headache, vomiting, fever, giddiness, meningism, and one erythematous rash; i.e., resembling Type 2 of Bury and Tobin.[2] On the same day as the last case, my youngest child brought home from a local school the illness described below, and the week following my eldest daughter and I were involved. My personal experience was of going about for two weeks as though with the toxaemia and fire of a severe sunburn.

Original case, daughter, aged 5½; onset 9 October, 72 hour fever with two peaks, abdominal pain, prostration. Sore leg on 7th day. Faeces 20th day: no isolation.

Second case (serial interval 6 days), daughter, aged 9; onset 15 October, of 72 hour fever with two peaks, right shoulder pain, prostration. Hyperaesthesia of upper abdomen, upper lumbar area, and front of thighs noted up to 9th day. At one time couldn't bear touch of bed clothes. Faeces 11th day: no isolation.

Third case (serial interval 7 days), self: 16 October 62. Felt a little tired in the morning. Went for a 30-minute swim in the lunch hour, and became acutely asthenic before coming out. Remainder of day felt chilled and tired, but no malaise, and had frequent needle-like pains widespread in limbs and trunk, lasting 1/5th to 1/10th sec. and unlike the vague, "woolly" aches of 'flu. After evening surgery went to bed with fever (101°F.), malaise, and chest pain. It was an intense, continuous burning pain involving the whole circumference of the thoracic cage and the right arm, and maximum over and above the right clavicle, where there was a distinct sensation of tumescence, but no actual swelling. The thoracic pain was unaffected by breathing (except for a tightness at full inspiration), by position, movement, and exercise; and diaphragmatic breathing was quite painless. There were no other symptoms such as headache, sore throat, or nausea. The bowels were costive for 12 days, and

there was slight burning on micturition in the fever period.

17 and 18 October 62. Pain and malaise continued, the fever slowly subsiding to 98.4°F.

19 October 62. After evening surgery the fever returned (101.2°F.) and it occurred to me I might have a Bornholm-like illness. I palpated the chest, shoulder and neck muscles, and found none tender. It was then I realized the pain was merged with hyperaesthesia of the skin, and that both were like those of a second degree sunburn, except that the pain extended beyond the hyperaesthetic area and felt deeper and more intense. The hyperaesthesia remained persistent and obvious up to the 18th day, after which I was less aware of it. It could be evoked by stroking, tangential pressure, cross movements of the clothes, and cold draughts; and there was skin-fold tenderness. There was no sensory impairment to pin and cotton wool.

The afebrile stage started on the 7th day. The chest pain continued, but the clavicular and arm pains ceased. Two new phenomena appeared. (1) Fluctuating peripheral areas of burning and hyperaesthesia, appearing and disappearing in the course of a few days and sometimes a few hours (figure). This activity ceased by the 18th day. (2) Sharp stabbing pains near the centre of the larger of these areas at certain focal points, chief of which were: two in the left femoral triangle, and one in the right and one in the left axilla. The pains lasted 1 to 2 seconds, and in the left thigh were sufficiently repetitive every few seconds off and on to keep waking me up in the early hours of the 11th morning. Firm local pressure gave some relief. On the 13th day these sharp pains ceased in the limbs and trunk, but occurred in the pre-auricular areas on the succeeding two days, when a patch of hyperaesthesia appeared over the vertex. Malaise and chills continued up to the 15th day. There were periodic sweats, chiefly in the febrile stage.

On the 10th, 11th, 12th days all the interphalangeal joints of both hands were stiff and painful to flex; and on the 10th, 11th days the right second and third metacarpophalangeal joints were purplish, swollen and painful over the dorsum.

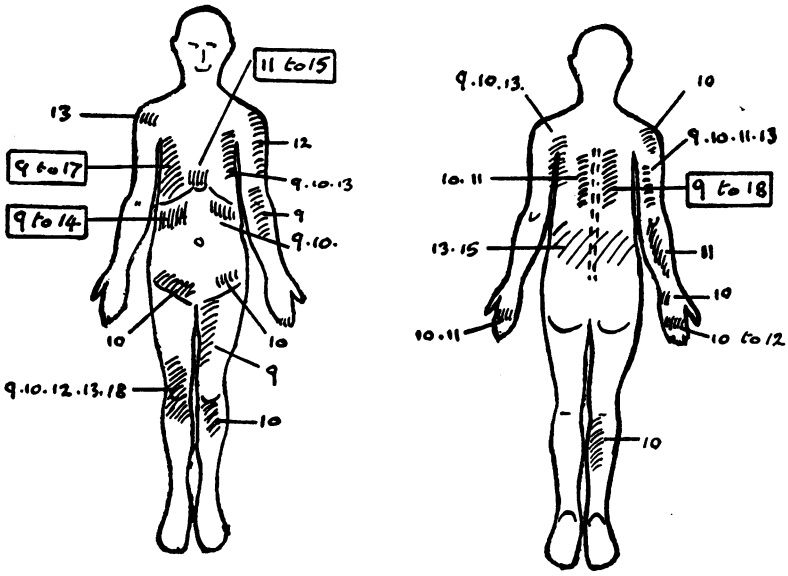
A faecal specimen was collected on the 8th day, and paired sera on the 8th and 16th days. No virus isolation was made.

Lassitude persisted for many weeks, there were low oral temperatures, e.g., 19 November (93.4°F.), and 20 November (93.3°F.), and a paroxysm ot tachycardia[5] 22 November.

Discussion

It would appear that Bornholm disease is the only acute virus illness in which areas of hyperaesthesia have been described, with

the exception of benign myalgic encephalomyelitis. This symptom may therefore be diagnostic. It is presumably reflex from deep foci of inflammation, as in appendictis and cholecystitis, and not due to direct nerve involvement as in the causalgia of nerve injury and shingles. When it is present differentiation has to be made between true muscle tenderness and that due to pressure on sensitive skin. This should not be difficult for two reasons: firstly, when muscle tenderness is present hyperaesthesia tends to be absent, and *vice versa* (as shown below); secondly, abnormal skin sensitivity can easily be shown by the points mentioned in the report. On the whole this interesting symptom[3] is a rarity, but occasionally predominates in some outbreaks. In the large Oxford epidemic of 272 cases[4] it occurred in only 2, and in the College of General Practitioners survey[5] of 186 cases in none. Scadding found it a prominent feature in 8 of his 20 Middle East cases,[6] and there was little evidence of muscle involvement; and Locke and Farnsworth likewise in their



CONSOLIDATED DAILY MAPS SHOWING FLUCTUATION OF HYPERAESTHETIC PAIN IN PERIPHERAL AREAS

Boxed areas = constant hyperaesthesia. Areas were assessed at 10 p.m. each day. Maps were not made before the 9th day.

cases.[7] In Sylvest's series muscles were swollen and tender, but skin sensibility was normal.[8] Finally, I can find only one previous report[9] of joint involvement, an arthritis of the wrist on the 4th day, but I believe that was from a dengue area.

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A NOTE ON THE TREATMENT OF WARTS WITH CHLOROSAL

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In the *Practitioner* for May 1961 (p. 667) appeared an annotation on the above subject. Previous to this I had been treating plantar warts with formalin soaks as recommended in an earlier article. I had found this method disappointing and, during the past 12 months, have been using chlorosal in the form of a weekly dressing. My practice was originally curettage and cauterization under pentothal but any effective alternative to this painful and bloody proceeding is to be welcomed and tried.

Method. The formula used is ac. salicyl 60 per cent; chloral hydr. 5 per cent; paraff. liq. 35 per cent. An ounce or two of this in a screw-topped glass jar will last for many patients and for the series here quoted I am still using the original 2 ounces prescribed when I commenced using the material a year ago.

The wart is cleaned with spirit or cetrimide and excessive callus may be lightly pared before a " medium-size corn-plaster " (N.H.S.