A FATAL CASE OF ACUTE MERCURIAL POISONING.

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CASES of acute mercurial poisoning are so rare and the literature so sparse that I think it desirable to place on record this well-marked case.

A young lady, 23 years of age, on October 1st swallowed, mixed in a tablespoonful of milk, a "headache powder," procured from a local chemist's shop. Immediately after taking the powder she was seized with a severe burning pain in the throat and with vomiting; she vomited again in a few minutes.

I was called to see her about twenty minutes after the powder had been swallowed. She was then sitting up in bed retching and vomiting a small quantity of white stringy mucus; she complained of a severe burning pain and feeling of tightness about the throat, slight burning pain in the epigastrium, and severe burning pain about the mouth, tongue, and lips. I found that the tongue, tonsils, and mucous membrane of the lips and cheeks were white and corroded; the face was slightly swollen and flushed; there was some tenderness over the stomach and slight general swelling of the abdomen; all parts of the mouth were exceedingly painful and tender.

Having administered as an emetic an apomorphine tabloid, $\frac{1}{4}$ gr., hypodermically and caused more vomiting, I gave magnesium carbonate in milk and washed the mouth with olive oil, and also induced her to swallow a tablespoonful of the oil; no eggs were obtainable at the time. Some collapse ensuing, I gave a cup of strong coffee. These remedies gave some relief to the patient, and she dozed off to sleep. About two hours later diarrhoea set in, two motions being passed mixed with blood; during the following night about six motions were passed, the later ones being almost entirely composed of blood; vomiting continued at intervals. There was total suppression of urine for twenty-four hours after taking the powder, but after that no trouble with the urine. Treated with mouth washes of tincture of myrrh and glycerine and borax, and small doses of bismuth and soda, and plenty of white of egg, milk and barley water, the vomiting and purging ceased, and all except the soreness of the mouth seemed to go well until nine days after taking the powder.

On October 4th (three days after poisoning) a haemorrhagic rash appeared on the skin of the face, and gradually spread all over the body and limbs; this was accompanied by a good deal of swelling of the face and soreness of the eyelids, and followed by free desquamation. On October 10th vomiting of blood set in, and I stopped all food by the mouth and fed only with nutrient enemata for a week. The vomiting soon stopped, and about October 16th the patient was able again to take a little barley water and Benger's food. The ulceration and sloughing of the mouth, however, was very troublesome, and on October 17th and 18th several haemorrhages occurred from the mouth and throat, and were accompanied by tympanitis of the abdomen and a rise of temperature to 101° , and the patient became much weaker. Painting with adrenalin solution stopped the haemorrhage, but swallowing gradually became impossible. After a temporary improvement the patient died very suddenly from heart failure on the evening of October 23rd, twenty-two days after swallowing the powder.

On October 1st I obtained six of the headache powders from the chemist and, along with the vomit, sent them to Mr. E. Davis, analyst, of Liverpool.

A large amount of mercury was found in the vomit, and the powders (which should have contained acetanilid, caffeine, and sodium bicarbonate, amounting to 5 gr. in all), were found to contain, in addition to the other constituents, a quantity of corrosive sublimate. The largest amount of corrosive sublimate found in one powder was 2.67 gr. How the corrosive sublimate got into the powders is a mystery which was not cleared up at the inquest. I was present at the *post-mortem* examination conducted by Dr. Nathan Raw of Liverpool, whose notes are as follow:

Body well developed and nourished. Rigor mortis pronounced. Pupils equal and dilated. There is considerable recent burning of the lips, nose, and lower eyelids, having the appearance of corrosion. The tongue, mucous membrane of the mouth, and fauces are of an ash-grey colour, with, in places, extensive sloughing. This appearance is also seen in the upper and lower portions of the oesophagus, the mucous membrane of which is corrugated and eroded.

The stomach shows intense congestion around the cardiac orifice. The mucous membrane is swollen and softened and of a bright-red colour with numerous ecchymoses. The small intestines here and there show intense injection, but in the caecum the mucous membrane is of a dark-brown colour with indication of intense haemorrhage.

Lungs.—Both engorged, 27 oz. each in weight. Scattered throughout both lungs were numerous thromboses, due to alteration of the blood. These varied from a point to the size of a shilling, and, according to Kauffman, are essential for the diagnosis of corrosive sublimate poisoning.

The liver and kidneys were enlarged and fatty.

The other organs appeared normal.

The chief features of this case were the comparatively small amount of corrosive sublimate in the powder—probably not more than $2\frac{1}{2}$ gr.—and the length of time the patient survived—twenty-two days; the longest recorded case I can find being nineteen days.

CASE OF ACUTE STRYCHNINE POISONING IN A CHILD: RECOVERY.

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N. S., aged 8, came under my care at the end of January, 1904, for post-diphtheritic paralysis, affecting the legs, and, to a slight extent, the palate and pharynx. She was treated with a mixture containing liquor strychninae hydrochlor. π ij t.d.s. for the first fortnight, and at the end of that time the dose was increased to ν t.d.s. The child progressed favourably, and the signs of paralysis were disappearing gradually. About 5 p.m. on March 1st I was urgently summoned to the patient's home by the message that "the little girl had taken an overdose of the medicine and had been in fits for two hours." On arriving at the house I found the child in a state of collapse—face flushed, lips cyanosed, swollen, and bleeding; tongue also swollen and bitten through; pulse frequent and weak; pupils dilated. There was then no rigidity of the limbs or trunk, and she was fully conscious.

The history of the case was that at 3 p.m. the father of the child had proceeded to administer the medicine to her, and, with almost criminal carelessness, had remarked that as the bottle was nearly empty she might as well finish the lot. Notwithstanding a protest from the mother, he emptied the contents of the bottle (a large dispensary one) into an egg-cup, and the child drank the whole amount. Five minutes later the mother, hearing a cry in another room, went to ascertain the cause, and found the little girl in strong convulsions. Her description of them to me was, that the back and head were arched, the teeth clenched, the arms and legs either rigid or "working," no loss of consciousness, but a complaint of great pain during the fits, during which she cried out that she was dying.

The dispensary being a considerable distance from the house, I was not sent for till two or three medical men in the immediate vicinity had been summoned, but none of them were able to attend. No real attempt at appropriate treatment was therefore started till my arrival two hours and a quarter later. The fits had continued with great severity during the whole of that time, but were then gradually subsiding.

Treatment.—Thirty grains of zinc sulphate were immediately administered in warm water, followed by strong freshly-made tea, and as no vomiting occurred, more of the drug was given a few minutes later. The fits not being severe just then, the stomach tube was also introduced and the stomach washed out with fair success. At the end of twenty minutes to half an hour, during which time the child remained free from convulsions, except for one slight attack, free vomiting set in. At the end of forty-five minutes the child, though collapsed, appeared to be much improved. No fit, except the slight one which I witnessed, had now occurred for an hour; the pulse was slower and stronger, the breathing normal; there was no rigidity of the limbs, and the mental state was quiescent. I therefore deemed it safe to leave the patient, but returned in an hour and found her still vomiting, somewhat weak and exhausted, but otherwise out of danger. Except for a slight rise of temperature during the next thirty-six hours (99° to 100° F.) recovery was speedy, and in two days she was running about as usual. I procured the same eggcup that had been used by the father and carefully measured out with water the approximate amount which on the man's own admission he had given the child. It was