RESULTS
OF
POISONING
BY
SULPHURIC ACID.

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READ MARCH 27TH, 1838.

MAY I be allowed to lay before the Society for inspection, the œsophagus of a woman who died forty-five weeks after having swallowed a part of two-pennyworth of oil of vitriol; whose case was read at the College of Physicians, in July, 1834, the patient being then living, when a cylindrical tube, about eight or nine inches in length, which had been ejected by a violent fit of coughing, was placed on the table.

At that time, the patient had survived the injury six months, had gained some flesh, and soon afterwards went out of the hospital very much recovered, though still subject to atmospheric influence, suffering much at the approach and during cold, wet, and windy weather, but very much better when it was warm and dry; at intervals, the expectoration was

copious, sometimes as much as two pints of frothy mucus in twenty-four hours; when the difficulty in swallowing was the greatest, the pain extended from the pit of the stomach to the shoulders;—the nourishment was generally soft eggs, milk, strong beef tea, ale, and porter, with occasional sops.

She was readmitted in September following, and was then more reduced than when she left; but in a short time afterwards she improved much in looks, strength, and spirits, with some increase of flesh, from the nutriment already mentioned;—she derived the most relief from peppermint.

On the morning of the 14th of November, she had a shivering fit, preceded by vomiting, and followed by continued but ineffective retchings:—dyspnœa at times, with great distress and constant pain about the region of the stomach and lower ribs of the right side; bathed in constant sweats; countenance greatly altered. During the day she had exquisite suffering over the entire surface of the body, so that, as she expressed herself, “not an inch of her was free from severe pain.” The wrists and other large joints became painful and swollen, but not red. For two nights was delirious and recognized no one:—slight relief was obtained from pieces of sugar saturated with laudanum. She died tranquilly on the 17th, nothing having been received into the stomach since the 14th; after having survived the swallowing of the acid forty-five weeks and three days.

Examination, eighteen hours after death.—Body extremely emaciated; the lower two-thirds of the

œsophagus thickened and narrowed, internally very vascular, irregular, and softened; the upper third shining like an old cicatrix. In the stomach, opposite to the spleen, was an opening of the size of a half-crown piece with softened edges; there was great softening of the mucous membrane of the stomach; the abdomen contained a quantity of dark coloured fluid, but no peritoneal inflammation.

It seemed most probable that the perforation of the stomach had taken place on the 14th, when the vomiting and rigors came on, followed by other distressing symptoms, and the greatly altered state of the patient. The contents of the stomach, which escaped into the abdomen, being only fluid, and her debilitated and exsanguine state, seemed sufficient to account for the absence of peritoneal inflammation.

When the difficulty in swallowing was very great, some thought it might have been advisable to pass a bougie down the œsophagus; but I never entertained that idea, and my colleague, Sir Charles Bell, was of my opinion; and the post mortem examination convinced others, who had before thought differently from us, that the passing, or attempt at passing, a bougie, would have, in all probability, accelerated the patient's death.

Sulphuric Acid retained by the stomach a quarter of an hour; death in twenty-two hours; mucous membrane of the stomach charred.

On the 3d of January, 1836, a young woman was admitted into the hospital at ten in the morning;

having taken, at twelve the preceding night, from two to three ounces of strong sulphuric acid, which remained on the stomach for a quarter of an hour, when she vomited a black ropy fluid.

On admission, she could only speak in a whisper, and was scarcely able to open the mouth, from which exuded a ropy mucus. Great tenderness from the pharynx down to the epigastrium:—pulse scarcely to be felt; extremities cold; every fluid ejected as soon as taken; frequently vomited a fluid of the consistence of treacle and colour of the carbonate of iron; disposition to doze; had no convulsion nor evacuation; and died at twelve the same night.

Inspection, fourteen hours after death.—Lining membrane of the mouth, pharynx, and œsophagus, of a silvery grey speckled appearance, like a snake's skin, from some of the carbonized matter adhering to the deeper parts of the rugæ, the more prominent being of a lighter appearance; the membrane of the tongue easily peeled off.

The stomach was very much distended, but contained only air, and when opened its mucous coat was nowhere visible, from its entire surface being covered with a black pitch-like substance, which did not wash off with ease, and when scraped it shewed the mucous coat of a pink colour, much swollen, but entire: the commencement of the duodenum had a similar appearance, which soon became less marked, and nearly disappeared at the beginning of the jejunum, when it gradually assumed the greyish appearance, somewhat like that of the œsophagus, but

of a much more dull colour, all of which seemed to terminate with the ileum.

The peritoneal coat of the small intestines, and particularly that of the stomach, were much inflamed, but no albuminous deposits were seen.