

THE USE OF REPEATED FRACTIONAL DOSES OF CALOMEL.

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PERHAPS some apology is needed for referring to the use of so well-known a drug as calomel; but I have had such marked success from its exhibition in the manner presently to be described that I am induced to publish a few details on the subject. Moreover, I do not find the use of calomel in minute doses referred to in the usual text-books on medicine or pharmacology. In cases of gastro-intestinal catarrh, whether following upon exposure to cold or from improper feeding (especially in children), where the stomach is intolerant alike of medicine and food, repeated small doses of calomel are of great benefit. A similar plan of treatment has in my hands been of great service in adults with protracted vomiting, where the more obvious causes for the sickness have been eliminated and the only additional symptoms have been an indefinite pain in the hepatic region and an abnormally red tongue. The following may be taken as illustrations of these two classes of cases.

CASE 1.—A child aged four years, after attending a children's party, thinly clad and partaking liberally of the good things provided, became ill. The bowels had been irregular, the motions being offensive and of a clay colour. Food which had been occasionally rejected was now not retained at all; the tongue was red and the breath sour. The temperature was 100°. The usual remedies having failed, the stomach was to have entire rest, small pieces of ice only to be taken by the mouth. Small beef-tea enemata with the occasional addition of a teaspoonful of brandy were to be administered every half-hour or hour. The following powders were prescribed: calomel, one grain; sugar of milk, eight grains—to be divided into ten, one to be placed on the tongue every fifteen minutes. By the time eight powders had been taken all the symptoms were improving and the child looked brighter, the bowels acted gently, and a little milk with lime-water was retained. Under bismuth and soda, together with judicious feeding, the child soon recovered its usual health.

CASE 2.—This patient was fifty-four years old, of spare frame, in good circumstances and most enthusiastic in church work, in addition to a large amount of district visiting &c., and would insist on attending early service fasting. She suffered from frequent attacks of indigestion and prostration, for the relief of which recourse was had to an occasional purge. As might have been expected a time came when the aperients not only failed to do good but brought on an irritable condition of the intestinal tract. On being called in I found the patient in a very feeble state, with the face pinched and inability to retain anything on the stomach. The bowels had been well acted upon, the tongue was red and patchy, and the breath faint. Effervescing mixture, champagne and other means failing to check the vomiting, I advised a plan of treatment similar to that prescribed in the previous case, the enemata of course being larger. The calomel was given in doses of one-sixth of a grain every twenty minutes until two grains had been taken. The effect of the treatment was most marked, improvement setting in after the first few doses had been taken. A small but faint-smelling motion was passed after the eighth powder, and at the same time the breath lost its peculiar sourness. The patient rallied but slowly owing to her weak condition, but ultimately returned to her normal state of health.

I now pass on to consider the applicability of this mode of treatment in the later stages of heart disease, where long-standing valvular disease has by backward pressure caused the well-recognised visceral complications, amongst which may be noted congestion and catarrh of the alimentary tract consequent upon the chronically gorged state of the liver. It is obvious that, digestion and assimilation being thus interfered with, not only does the general nutrition suffer, but the already enfeebled and dilated heart yields more and more; the jaundice deepens; the oedema becomes general and

threatens to block up the lungs; the urine is scanty and loaded with albumen; and the heart, by its irregular and intermitting action, seems on the point of giving up the weary struggle against such long odds. The medical attendant finds the remedies which have all along stood him in such good stead no longer succeed, for they are either rejected by the stomach or, if retained, are not absorbed.

The following case is so striking an example of the benefit derivable from the mode of treatment here advocated that—with the consent of my colleague, Dr. Herschell, under whose care the patient was admitted—I give it as an illustration.

CASE 3.—A woman twenty-five years of age was admitted on March 11th to the National Hospital for Diseases of the Heart. Her family history was good. She had enjoyed good health until seven years ago, when she had rheumatic fever, being confined to bed for fourteen days. Her present illness came on after five years' good health—i.e., two years ago. She had been gradually getting worse and complained of palpitation, sensation of tightness round the waist, oedema of the legs and inability to lie on the left side. On admission the pulse was irregular and weak (120); the heart's apex was at the sixth space, a distinct thrill being audible. A double bruit at the apex was heard, the systolic murmur being conducted to the axilla. The heart's action was irregular, intermitting and tumultuous. The urine, of sp. gr. 1030, contained a copious deposit of lithates and a trace of albumen. The appetite was bad. There was much flatus. Without going into the details of the report, it will suffice to say that under treatment the symptoms improved up to the early part of April, when the secondary effects of heart failure became more marked. During the later days of April and the first week of May sickness was every now and then noted. On May 7th there was considerable oedema of the face. The medicine caused sickness. On the eighth the symptoms became aggravated. Five grains of calomel and two scruples of compound jalap powder were ordered. No effect was produced by the powder, which was probably returned during the attacks of vomiting. The jaundice was now intense and the breath sour and offensive. On the 9th the patient appeared to be sinking. With some difficulty her wish that she should return home and die there was understood. Her condition was, however, so critical that it was considered unsafe to move her. On consultation one-sixth of a grain of calomel every half-hour and nutrient enemata were ordered. On the 10th she had taken twenty-four powders, being equal to four grains. The bowels were opened three times; the oedema of the face was much less. She seemed better and was taking milk and soda in small quantities. On the 11th she had taken eighteen more powders, being equal to three grains. The oedema was still further reduced. On the 12th the bowels were freely opened. Her general condition was much improved and she was cheerful. The journey to her home was successfully made in the afternoon. A few days later her medical man reported that the patient was able to walk out of doors with assistance. A later report is equally satisfactory. In this case the usual remedies, acting directly on the heart—whether taken alone or combined with diffusive stimulants—ceased to do any good. Bismuth, alkalies, creasote &c. gave no relief to the gastric symptoms. Calomel in hitherto efficacious doses was rejected and the woman was sinking. That the treatment saved the patient from impending dissolution was obvious to all who watched the case.

The probable explanation of the success of the treatment adopted in the three illustrative cases may thus be summed up: In the two former cases the symptoms were due to catarrh of the upper part, at any rate, of the alimentary tract, associated with some hepatic congestion. I am inclined to attribute the earlier beneficial effects of the calomel to the germicidal and antiseptic properties of the mercury. Certain it is that the stomach became more tolerant of food, and the breath began to lose the odour one is accustomed to connect with the fermentative process, before the liver could have been acted upon by the drug, though improvement is more marked after the bowels have been acted upon. In the cardiac case relief of the portal congestion is probably the most important effect of the calomel. The right side of the heart, feeling first the lessening of the pressure, is able to do its work better; the hepatic cells resume to some extent their function; and the kidneys, sharing in the general relief of tension, cause a decrease of the jaundice and lessening of the oedema. The appetite returns in due course.

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SIMULTANEOUS AND SYMMETRICAL TUMOURS OF THE LACRYMAL AND PAROTID GLANDS.

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THE few cases of this nature which have been published and to which attention has been drawn in a recent issue of THE LANCET must be my excuse for putting on record this case, though it is less complete in some details than I could have wished. A married woman aged sixty-one was admitted into the Sheffield General Infirmary under my care on Oct. 17th, 1884. There is nothing to mention about her family history except that four brothers and one sister died of phthisis. Beyond also chorea, scarlet fever and rheumatism in quite early life there is nothing to record in her personal history; she has since then had good health. Catamenia ceased when she was forty-five. She, however, came to the infirmary on account of swellings of the eyes. In the previous January she noticed that the right eye was swelling and also the cheek; the left began shortly afterwards. On examination the following conditions were noted. In the right orbit at the outer and upper angle there was a lobulated growth just in the situation of the lacrymal gland; a portion projected more under the upper eyelid. The growth was of considerable size and appeared to be closely attached. In the left orbit the situation of a similar growth was detected; it was, however, smaller in size. Both reached down under cover of the external wall of the orbit and could be seen under the conjunctiva. They also formed noticeable swellings in the eyelids. There was likewise at this time some swelling of the parotid glands, sufficient to attract attention from the enlargement it gave to the side of the face. Some other conditions I remember well were present at this time. The tongue was dry and glazed-looking, presenting a very peculiar appearance; there was a want of moisture in the mouth and the soft palate was somewhat swollen. In the left eye there were old retino-choroidal changes and vision was reduced to "fingers at one foot"; the right indicated +3 D $\frac{1}{2}$. She remained in the infirmary for some little time. After this she was lost sight of, as she lived a little distance away. She did, however, pay me a visit a year or two afterwards, and then both the lacrymal and parotid enlargements had increased in size. Unfortunately the notes made by me at the time have been mislaid. Later still I heard of further enlargement of the side of the face, but a projected visit to her was put off by the sudden death of her medical man, followed by her own shortly afterwards. She died on Aug. 27th, 1889. A daughter of the patient some time ago came to see me at my request and from her I learnt the following particulars. The orbital tumours greatly increased in size. The left became the larger; it was the size of a small teacup, was of a bluish colour, and reached to the temple and down the face. The right side was very large, but smaller than the left. The right side of the face became ulcerated, making a hole into the mouth; the patient had swellings on both sides of the face (parotids), but it was the right side only which "broke." She always complained of her mouth being dry and her tongue also; "she had not spittle enough to moisten a stamp." The sublingual and submaxillary glands were full when she had been last seen by me and they continued evidently to be affected with the parotids. She lingered for six months after the face "broke" and died exhausted. The lumps in the orbit had covered over the eyes so much that sight consequently became worse. The daughter told me that several years before any trouble came to her mother's eyes in the way described she had been salivated and that her teeth had fallen out in consequence.

A summary of the cases of symmetrical tumours of the lacrymal and parotid glands which have been recorded is given in the *Ophthalmic Review* for May, 1892, page 146. Dr. Fuchs' case was that of a man aged sixty-one and he was under observation for twelve months without appreciable alteration. A portion of the orbital growth, removed and examined with the microscope, showed that it was a lymphoma. The second case was in a girl aged twelve and slowly progressive enlargement of the lacrymal and parotid glands occurred; the submaxillary glands were also affected. A year later the enlargement of the parotid and lacrymal

glands had almost disappeared, but the submaxillary gland had become larger. This was Dr. Haltenhoff's case. A third (that of Dr. Mikulicz) was one in which the lacrymal and all salivary glands were implicated; it was thought to be a case of lympho-sarcoma. Another reported by Gordon Norrie was probably a case of dacryo-adenitis following mumps. A fifth case has been recorded by De Wecker and Masselon in a soldier aged twenty-six. Between March, 1891, and August of the same year the swelling beginning at the first date had increased so much that the palpebral fissures were reduced to small chinks. The swelling in the parotid regions had commenced about the same time. The lacrymal tumours were removed and the microscopical report was: "Epithelial tumours of the lacrymal glands." Two months later the patient was in perfect health and the parotid swelling was subsiding. These are, as far as I have been able to ascertain, the only cases on record, except the interesting case referred to by Dr. Parkhurst in a note in THE LANCET of March 25th, p. 690, relating to lacrymal enlargement associated with ordinary mumps. It will be noticed that the cases which most resemble each other are that of Fuchs and my own. During the time Fuchs had the case under observation (one year) no progress appeared to have been made in the disease. My own was very slow, at all events at first, but the after-progress could hardly leave any doubt as to its malignant nature. It is the only case which apparently up to the present has been traced to its termination.

Another point worthy of note is the dryness of the mouth and tongue, indicating, it would seem, an insufficient secretion of saliva. The records accessible to me now do not mention whether the same has been observed in the cases above alluded to. My notes make no mention of the secretion of tears, but in cases in which the lacrymal gland has been inflamed (adenitis) an interference with secretion has been observed, *vide* my case of symmetrical dacryo-adenitis.²

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL AND THERAPEUTICAL.

THE USES OF PAPAIN AS A "SELECTIVE CAUSTIC."

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THE fact that papain has the power of digesting and thereby destroying dead and diseased animal matter, whilst it is inactive towards healthy living tissue, is not, I think, sufficiently appreciated by surgeons. Mr. Lightoller of Ipswich, Queensland, first pointed out to me its value as a "selective caustic." He has used it with success in a great variety of cases; but I wish now to draw attention particularly to its usefulness in three classes of cases.

1. *Diphtheria*.—There is little doubt that the reason why papain has fallen into disuse in the treatment of diphtheria is that it has been used too sparingly. It is non-poisonous and can be applied freely without danger. My experience agrees with Mr. Lightoller's that almost all trace of diphtheric membrane disappears in a few hours in cases where the powder can be insufflated freely and frequently.

2. *Tuberculous ulceration*.—On Oct. 7th, 1890, I was consulted by a patient who had suffered from influenza in the previous May, and since then "cold after cold" had kept his voice hoarse. At times he suffered from constant expectoration and cough; he had tried various inhalations and mixtures without obtaining relief. There was a slight family history of phthisis. On examination there were signs of disease in the right lung, but these, I was informed by his regular medical attendant, had been present for six years previously. The left vocal cord was ulcerated along its whole length. There was considerable infiltration of the ventricular band and the arytenoid body on the same side and an oedematous-looking swelling in the inter-arytenoid commissure. By microscopical examination of the sputum I repeatedly found the bacillus of tubercle and felt no doubt about the tuberculous nature of

² Transactions of the Ophthalmological Society, 1892, p. 51.