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## When Acupuncture Came to Britain

Acupuncture periodically casts its spell in the West, but seldom on more than a minority of the public and on even fewer of the medical profession. That its use in Britain goes back to the early years of the 19th century may come as a surprise to doctors today, though as noted in these columns recently<sup>1</sup> it was a subject that graced the pages of the first volume of the *Lancet* in 1823. A recent review of its practice in the nineteenth century therefore makes interesting reading.<sup>2</sup>

John Elliotson, who began to employ the technique at St. Thomas's Hospital in 1824,<sup>3</sup> describes<sup>4</sup> how Ten Rhyne, a medical officer in the East India Company, brought news of it to Europe in 1679. He had seen it used on one of the Emperor of Japan's guards, who when overheated had been seized with pain and vomiting after drinking iced water, a condition known as *senki*. An interesting review of Ten Rhyne's account of Japanese medicine appeared in 1683.<sup>5</sup>

Engelbert Kampfer, a Jesuit missionary, was another early witness of the operation. The first British enthusiast seems to have been John Morss Churchill, of Leicester Square, who in 1821 published a monograph on the subject<sup>6</sup> dedicated to Astley Cooper and a report<sup>7</sup> of three further cases in 1823. He claimed that "Mr. Scott of Westminster," a patient of Edward Jukes, was the first to be treated by acupuncture in this country. Churchill, who restricted its use to the treatment of tympany and rheumatism, had been impressed by a report<sup>8</sup> of an investigating committee set up in 1811 by the Medical Society of Paris. It is clear that William Coley, of Bridgenorth, was well informed on the subject of acupuncture and he probably had the treatment of *senki* in mind when in 1797 he employed<sup>9</sup> paracentesis on an infant with tympanites, releasing not only a hissing of air but also a trickle of faecal fluid. The patient survived for 18 months.

The example of Jukes and Churchill was taken up by others. John Tweedale,<sup>10</sup> of Lynn Regis, Norfolk, reported that he succeeded in resolving a state of intractable anasarca into one of simple oedema of the feet and ankles, and Frederick Finch,<sup>11</sup> of Greenwich, that after successes in the treatment of generalized oedema he had cured a man with trismus and rapid pulse following multiple lacerations of the body and scalp. He introduced needles into the masseters, after which the patient was able to drink hot chocolate and tincture of opium. (J. A. Grant,<sup>12</sup> of Ottawa, later claimed to have cured a case of tetanus by inserting needles on both sides of the spine.) Mr. Wansbrough,<sup>13</sup> of Fulham, chased a migratory form of back

pain from site to site before he succeeded in pinning down the "enemy": the *Lancet's* editor congratulated him on his strategy. From Scotland John Renton,<sup>14</sup> of Penicuik, reported the case of a baronet who cured himself of sciatica by inserting needles into his calf. The practice of acupuncture had for long been known in Dumfriesshire, wrote Renton, who had other cures to his credit, including that of pain in his own deltoid muscle. John Tatam Banks,<sup>15</sup> of Louth, who had watched the procedure in Paris hospitals, did not recommend it for patients with a syphilitic trait, while Elliotson<sup>4</sup> thought it was contraindicated in the presence of inflammation of any sort. The latter could not explain how it worked, but he had, to his own satisfaction, excluded the possible roles of fear, confidence, and counter-irritation. His preoccupation with animal magnetism discredited him in the eyes of the profession and harmed the cause of acupuncture.

Morand and Cloquet in France had suggested that the needles, by their power of conduction, removed the electric (or nervous) fluid from within the painful nerves, a view which was later expressed more precisely by Robert Druitt,<sup>16</sup> who believed that the relief of pain was due to the escape of fluid from the sheath of the nerve. He mentions the use of acupuncture in anasarca, hydrocele, and ganglion. Most of those who had acquired some skill in the use of the needles agreed that the oozing out of fluid could not account for more than a fraction of what disappeared during treatment, and so the remainder must have been absorbed through the tissue. H. S. Belcobe,<sup>17</sup> of York, who had cures to report, was not interested in how the treatment worked, being content in the knowledge that "how and when to apply is the wisdom of medicine." But such a view did not satisfy the inquiring minds of most Victorian doctors, who were chary of acquiring a skill whose rationale was not evident.

Brown-Séquard's work on the role of the sympathetic nervous system in the reflex arc provided Ogier Ward,<sup>18</sup> of Kensington, with a suitable explanation of five satisfactory case reports. Further developments were to insert needles on the side of the body opposite to the lesion. Interest in acupuncture was rekindled when physiologists and microscopists were so actively adding to knowledge. T. Pridgin Teale,<sup>19</sup> surgeon to the Leeds Infirmary, who had experimented on himself and his friends, reported successful results in a third or more of cases of muscular disability and described the relief of pain in about one case in ten as "brilliant." The efficacy of the needles,

he thought, depended on the ability to create hyperaemia in impoverished tissues. Acupuncture, he said, had been traditional practice at Leeds for many years, and before then it had been in use in Birmingham. His pupil Simon Snell,<sup>20</sup> surgeon to the Sheffield Eye Hospital, believed that the best results could be expected when the patients were encouraged to move the affected parts after the needles had been removed. William Craig,<sup>21</sup> a surgeon in Ayr, obtained relief from pain for a patient with a "colloid cancer" in the supraspinous fossa, and he recommended the use of acupuncture in cases of carcinoma uteri.

Acupuncture is said<sup>22</sup> to have been devised some 26 centuries B.C., its purpose being to re-establish in the patient a correct equilibrium between the *yang*, or the male element, and the *yin*, or female element. While this worthy motive appears never to have been challenged, the variety of explanations for its modus operandi, the complexity of the techniques,<sup>23</sup> its exploitation by charlatans for such socially unmentionable complaints as spermatorrhoea, impotence, and venereal disease, and above all its built-in association with the occult seem to have weighed heavily against its chances of a thorough trial by medical scientists faced with competing claims of seemingly greater priority.

<sup>1</sup> *British Medical Journal*, 1973, 3, 649.

<sup>2</sup> Haller, J. S., *New York State Journal of Medicine*, 1973, 73, 1213.

<sup>3</sup> Elliotson, J., *Medico-Chirurgical Transactions*, 1827, 13, 467.

<sup>4</sup> Elliotson, J., in *Cyclopaedia of Practical Medicine*, vol. 1, ed. J. Forbes, A. Tweedie, J. Conolly, p. 32. London, Whittaker Treacher, 1833.

<sup>5</sup> *Philosophical Transactions*, 1683, 13, 222.

<sup>6</sup> Churchill, J. M., *A Treatise on Acupuncture*. London, Simpkin Marshall, n.d. (1821).

<sup>7</sup> Churchill, J. M., *London Medical Repository*, 1823, 19, 372.

<sup>8</sup> Berlioz, L. V. J., *Mémoires sur les maladies chroniques, les évacuations sanguines et l'acupuncture*. Paris, Croullebois, 1816.

<sup>9</sup> Coley, W., *Medical and Physical Journal*, 1802, 7, 223, 235.

<sup>10</sup> Tweedale, J., *London Medical Repository*, 1823, 20, 313.

<sup>11</sup> Finch, F., *London Medical Repository*, 1823, 20, 403.

<sup>12</sup> Grant, J. A., *Medical Times and Gazette*, 1865, 2, 495.

<sup>13</sup> Wansbrough, Mr., *Lancet*, 1826, 10, 847.

<sup>14</sup> Renton, J., *Edinburgh Medical and Surgical Journal*, 1830, 34, 100.

<sup>15</sup> Banks, J. T., *Edinburgh Medical and Surgical Journal*, 1831, 35, 323.

<sup>16</sup> Druitt, R., *Surgeon's Vade-mecum*, ed. S. Boyd, 8th edn., p. 677. London, Renshaw, 1859.

<sup>17</sup> Belcombe, H. S., *Medical Times and Gazette*, 1852, 4 NS, 85.

<sup>18</sup> Ward, T. O., *British Medical Journal*, 1858, 728.

<sup>19</sup> Teale, T. P., *Lancet*, 1871, 1, 567.

<sup>20</sup> Snell, S., *Medical Times and Gazette*, 1880, 1, 661.

<sup>21</sup> Craig, W., *Edinburgh Medical Journal*, 1868-9, 14, 617.

<sup>22</sup> Major, R. H., *A History of Medicine*, vol. 1, p. 94. Springfield, Thomas, 1954.

<sup>23</sup> Mann, F., *Acupuncture*. London, Heinemann, 1962.

## Pancreatitis from Oral Contraceptives

In most women given oral contraceptive steroids the serum lipids show a slight increase. A recent report from Boston<sup>1</sup> describes how two patients taking combined oestrogen and progestogen oral contraceptives developed gross hyperlipaemia associated with recurrent attacks of abdominal pain subsequently diagnosed as acute pancreatitis.

The first patient had bouts of upper abdominal pain two weeks after starting on an oral contraceptive. They recurred over the next few months and culminated in a severe attack requiring admission to hospital. On examination she was tender over the upper abdomen, and bowel sounds were diminished. The white cell count, serum amylase, and serum transaminase were all raised and the serum calcium was depressed. But the most impressive finding was the lipaemic appearance of the serum, with a serum triglyceride concentration of 7,100 mg/100 ml and serum cholesterol of 1,420 mg/

100 ml. A diagnosis of acute pancreatitis was made, and conservative management was instituted. Oral contraceptives were withdrawn. Subsequent lipoprotein electrophoresis showed a type 4 hyperlipoproteinaemia<sup>2</sup> pattern, and a similar pattern was evident in the patient's mother.

The second patient presented an equally striking picture. She had been taking oral contraceptives for some two years before developing abdominal pain suggestive of acute cholecystitis. The concentrations of serum cholesterol and triglycerides were raised, and at laparotomy, 10 days after admission, the gall bladder was found to be normal but the pancreas was inflamed and necrotic. On discharge she restarted oral contraceptives, and three months later she was again referred to hospital with a recurrence of abdominal pain. Biochemical findings were similar to those in the first case—raised serum amylase, low serum calcium, with serum triglycerides of 3,560 mg/100 ml and cholesterol 724 mg/100 ml. Treatment was again expectant. Withdrawal of oral contraceptives resulted in a fall in triglycerides and cholesterol. Subsequent investigation when she was taking an unrestricted carbohydrate diet again showed type 4 hyperlipoproteinaemia.

Several other such cases have been reported,<sup>1,3</sup> each presenting a similar picture—attacks of abdominal pain occurring after taking oral contraceptives, sometimes followed by laparotomy with the mistaken diagnosis of acute cholecystitis. In several of these cases either the lipid abnormalities were initially not looked for, or, if they were, their significance was not appreciated.

Two important questions emerge from these clinical observations. Firstly, what is the relationship between oestrogen-containing oral contraceptives, hyperlipaemia, and pancreatitis? Why some patients should show massive hyperlipaemia when given these drugs is not clear. The clinical picture appears most commonly in moderately fat women with hyperlipoproteinaemia, which may also be present in other members of the family and who may also have impaired glucose tolerance. The suggestion has been made that hyperinsulinaemia is necessary for the development of gross triglyceridaemia, since diabetics with low levels of serum insulin do not usually develop hypertriglyceridaemia when given oestrogen-containing oral contraceptives, even when given a high carbohydrate diet.<sup>4</sup> Further, hypertriglyceridaemia and hyperinsulinaemia are well correlated in persons on a free-carbohydrate diet.<sup>5</sup> Why hyperlipaemia should precipitate pancreatitis is equally obscure.

Serum lipid abnormalities frequently precede attacks of pancreatitis, though hyperlipaemia as an effect of pancreatitis is equally well known.<sup>6</sup> It has been tentatively suggested that in the presence of hyperlipaemia, lipase in the pancreatic blood vessels may cause triglyceride breakdown within chylomicrons, thus releasing large amounts of fatty acids. These might then cause local capillary damage, leading to local release of pancreatic enzymes and pancreatitis.<sup>7</sup> In support of this is the observation that patients with hyperlipaemia develop acute pancreatitis more frequently than normal persons, and the risk of their doing so can be decreased by dietary treatment of the lipid disorder.

The more immediate question is what advice should be given to patients about to go on oestrogen-containing oral contraceptives. It is worth noting that oral progestogens given alone to women with familial type 5 hyperlipidaemia has been reported to improve their lipid abnormality.<sup>8</sup> (These agents may in fact protect some oestrogen-sensitive women who might otherwise become hyperlipaemic when given combination oral contraceptives.) It is obviously impracticable to