Adult hypertrophic pyloric stenosis — a description in 1834?

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SUMMARY. John Peacock MD was in practice in Darlington when he published his *Practical Hints on the Treatment of Several Diseases* in 1834. It is suggested that his cases described therein of 'scirrhous pylorus' are adult hypertrophic pyloric stenosis. If authenticated, his work would predate the earliest description of this condition by the French pathologist, Professor Jean Cruveilhier in 1835.

JOHN Peacock was in medical practice at 15 Skinnergate, Darlington, from the late 1790s until his death in 1841. In 1834, he published a book of some 77 pages entitled *Practical Hints on the Treatment of Several Diseases* (Peacock, 1834a). On pages 66 to 70 he described three cases of a condition, which he called 'scirrhous pylorus'. A typical patient would show 'indigestion, with much depression of the strength and spirits'; these symptoms would precede pain and vomiting. The vomit would show food taken up to 24 hours previously, require 'a great effort to dislodge it', be acid in taste and offensive, always associated with heartburn, and sometimes dark in colour or showing blood. Anorexia would precede emaciation.'In some cases a tumour, as big as a large orange, may be plainly discovered, upon pressure, in the region of the navel. The stools are always dark-coloured . . . are generally costive.' Patients might experience severe head pains and giddiness.

Peacock's opening sentence is of particular significance: 'The pathology of this dreadful complaint is not easily ascertained; only it is certain that our patients will frequently die of it, and the nature of the disease has then been ascertained by dissection; and when we find another labouring under the same train of symptoms, as far as we can make out, we have a right to suppose they proceed from scirrhous pylorous (sic).'

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Clinical descriptions

Peacock's first case was a 'very feeble worn out man', aged about 50 years. He had had indigestion for some months, also depression and headache. He complained of heartburn and capricious appetite, almost constant gastric pain, black stools, constipation, frequent vomiting and thirst. 'He had a hard tumour upon the stomach, which could be easily felt near the navel, and was very sensible on the slightest pressure.'

Peacock advised treatment by antacid pills (carbonate of soda and magnesium, in equal parts) five or six times whenever the acid prevailed, washed down with Dinsdale water (from a local sulphureous spring) 'and five grains of the blue pill every night and morning till he felt it upon his gums — he then relinquished his morning pill' (presumably pilulae hydrargyri, a preparation of mercury). After two months of this treatment — on occasion taking his pills eight times in one day — 'every symptom had vanished . . . the tumour was gone from the region of the navel, and there was no sensibility about the epigastrium; and the man, as well as losing the anorexia, was evidently gaining condition'.

Peacock's second case suffered from similar symptoms, but he does not mention an abdominal tumour.

His third case was that of a labourer, who complained of stomach and head pains. 'He had black stools, . . . he disgorged his food at irregular intervals . . . his weakness was pitiable. The stomach was sore and tense, and the pain severe, but the round tumour upon the pylorus was not well defined.' Peacock advised similar treatment to his first case, but 'this patient's complaint was much more slowly acted upon.' He had come under Peacock's care in the winter of 1833, but, 'It was not till September (1834) that he ventured to contract with the surveyor of the Yarm road for the breaking of the stones. It will scarcely be credited, that in the first week he earned sixteen shillings by his own labour.'

Peacock offers scant follow-up. In his first case, he received a 'good account of the patient after six months'; in his third case, 'whilst I am writing (October 24), he has not slackened his exertions'.

Differential diagnosis

The cases described by Peacock show a dyspeptic pattern, with pain and heartburn. Their vomiting suggests that of pyloric stenosis, with a recognizable content of food ingested many hours previously. In descriptions of cholera elsewhere, Peacock uses the term 'black stools' when melaena seems unlikely (Peacock, 1834b); conversely, in his *Hints* . . . (Peacock, 1834a) he cites the case of a spinster aged 40 years, 'with melaena and general dropsy . . . much deranged digestion . . . pitchy looking vomit . . . her stools were often nearly black, but more frequently resembling putty, but somewhat darker'. He appears to confuse the terms black stools and melaena. Interpretation of his terminology after 200 years is difficult.

Peacock's three cases generate a wide range of diagnoses: a simple tumour or cyst of any upper abdominal viscus — malignancy — peptic ulcer or its complications — pancreatic or gall-bladder pathology, etc.

His treatment might relieve an obstructive element — such mechanical relief affecting the ease with which 'the tumour of his scirrhous pylorus' remained palpable.

Medicine in 1834

Conventional practice involved clinical assessment leading to a tentative diagnosis. There were no gastrointestinal investigations as known today. Management was on the lines of general advice and dieting, drug treatment and general advice with scant follow-up.

Because of limited techniques, surgical practice was confined to the external areas of the abdomen. In 1835, Sir Astley Cooper (Cooper, 1835) lectured to students on a range of abdominal topics, namely: hernia — hydrocele (sic) — urinary calculi — retention of urine — dropsy of the abdomen — fistula-in-ano — disease of testicle, and piles.

Operations were carried out under opiate or alcholol, with speed and dexterity being the surgeon's answer to shock and haemorrhage. Anaesthesia and antisepsis lay a few years ahead. More detailed knowledge of intra-abdominal pathology was available, but may have appeared theoretical to the teachers of these days. Thus congenital hypertrophic pyloric stenosis had been recognized from the eighteenth century, although it was not until 1835 that Professor Jean Cruveilhier described the condition in the adult (Cruveilhier, 1835). (Gordon MacNaught in his 1957 article (McNaught, 1957) reproduces the drawing of Cruveilhier's specimen.)

There is one discordant quotation of the date for Cruveilhier's work. Dye and colleagues (Dye *et al.*, 1979) review infantile and adult hypertrophic pyloric stenosis, and give '1833' as the date for publication of Cruveilhier's work. They cite Mack's historical review of the subject (Mack, 1942) as the authority for this date. Mack's review, unexpectedly, does not list Cruveilhier's work. A photostat of the title page of Cruveilhier's work, provided by the Librarian of the British Medical Association, shows the dates of publication of the second volume of Cruveilhier's *Pathology* as between 1835 and 1842. If Peacock's cases are accepted as adult hypertrophic pyloric stenosis, then his publication in 1834 predates that of Cruveilhier.

Discussion

Peacock's evidence to merit the diagnosis is slender, apparently clinical without direct pathological confirmation. Yet in his opening sentence there is the suggestion that he had prior pathological knowledge: 'And the nature of the disease has then been ascertained by dissection.' Also, his choice of the terms 'scirrhous' and 'pylorus' is revealing. To site the lesion accurately in the pyloric region presupposes pathological examination. Autopsies in the nineteenth century were carried out by general practitioners, often in the cramped mortuaries of local hospitals.

Scirrhous — derived from the Greek *skirrhos,* hard — was in common use at that time to describe hard lesions of the breast. Buchan used the term in 1786 (Buchan, 1786) to describe a hard, indolent tumour arising in the breast; as did Astley Cooper in his student notes of 1835 (Cooper, 1835), the implication being that the swelling was likely to enlarge and become malignant — that a 'scirrhous' was an occult cancer. Mack (Mack, 1942) cited Hezikiah Beardsley in 1788 reporting his observations to the Medical Society of New Haven County in Connecticut, on a boy of five years, dying from a 'scirrhosity' of the pylorus. Also, Thomas Williamson in 1841 (Mack, 1942) in Edinburgh described a boy of five years with a 'scirrhus' of the pyloric extremity of the stomach. Beardsley and Williamson from post-mortem study both chose the adjective 'scirrhus' to describe the hardness of the lesion, supporting my feeling that Peacock's choice of the term was based on 'dissection', or post-mortem examination.

Biographical details

John Peacock was born in the small farming village of Stainton-in-Cleveland in the North Riding of Yorkshire, about five miles south of Stockton-on-Tees. His father, the curate there, baptised John in April 1761; probably on the fourth day of that month, but the date in the register is difficult to decipher. Careful search among the records of universities and colleges in this country, Ireland and Leyden has failed to confirm the source of his MD.* The Keeper of Special Collections at Edin-

**Reviewer's comment.* Dr Peacock and his MD: I expect Dr Stout knows that publishers had the habit of sticking MD after a medical author's name when in fact he had no such degree; it helped the sales. So, if the MD is based on the title page of the work and no more, it may mean very little. If there is corroborative evidence of the MD and

burgh University confirms that a student called 'John Peacock' enrolled at the university for the session 1777–78 only, but did not graduate there. This period is difficult to research, as many 'doctors' assumed their titles.

Peacock was not in Darlington between 1779 and 1783, a period covered by three editions of an early *Medical Register* (Medical Registers, 1780, 1785, 1799); his name appears in Darlington in the 1790s. On 19 March 1799, he married Miss Mary Brown, who came originally from Hull. Their eldest son, Beddoes, followed his father's career. He took his LSA in 1824, and graduated MD from Edinburgh in 1825, then joined his father in practice at 15 Skinnergate, Darlington. There was a younger son, John, and a daughter, Anne.

John, Senior, had literary pretensions; as early as 1799 he composed a verse play about local and national events. He enjoyed the cut and thrust of correspondence, crossing swords in the *Lancet* of 1834 (Peacock, 1834b) with an adversary of repute — Dr J. Ayre of Hull — over the management of cholera.

Peacock enjoyed controversy. In 1805, he published a description of the local springs at Dinsdale (Peacock, 1805), which were being developed for their medicinal properties. On page 48, he boasts: 'I have not yet had any experience in the power which the waters might exercise over confirmed consumption, having been for some time engaged in the prosecution of another discovery, which in every case arrests, and in ten cases out of twenty, cures this terrible disease.'

In 1824, Thomas Backhouse, a well-known Quaker, provided a stomach pump for use by practitioners. Peacock objected to its use, provoking a caustically worded pamphlet from Backhouse (Backhouse, 1824):

Dr Peacock
No peacock he of Juno's Royal breed,
Nor yet akin to sage Minerva's owl,
That we his loud discordant cry should heed —
The senseless cackling of a barn-door fowl;
Who from the dunghill where he struts a king,
Scatters his filth, and flaps his heavy wing.

Peacock's claim of a nostrum for consumption still rankled with Backhouse, who issued this further taunt: '. . . If the possession of ten pounds of medical dignity from St Andrews entitles him to be so called.' (Peacock's MD was not granted at St Andrews University.) In 1829, Peacock revised his pamphlet on the Dinsdale Springs, omitting his claim for the cure for consumption. In 1834, he provided a copy of his *Hints . . .* for review by the *Lancet*. The review (*Lancet,* 1834) started: 'Thus does straighforward nature sometimes put to shame the contrivances of cunning art. . . .', then going on to abstract his last two remarkable cases.

In 1837, a letter to the *Lancet* (*Lancet,* 1837) offered some biographical details: 'I am now a decrepit old man who has had as extensive a practice, without any controul (sic), during fifty years, as any man in England.' In his letter he discussed two diabetic patients under his care in 1792.

John Peacock died in 1841, in his eightieth year.

Beddoes continued the family practice until his death in 1856. He had suffered from spinal disease, which grossly restricted his mobility. His obituary commented that he was said to be the last person in Darlington to use a sedan chair.

it was not Edinburgh or Glasgow, I wonder if Dr Stout tried Aberdeen or St Andrews? Both universities were popular because you could buy your MD from them for £10 and two testimonials, and I have a feeling that the records of MDs so obtained are so incomplete that a negative search does not rule out such a possibility. I would guess that Peacock's MD was 'awarded' by his publisher or bought through the post from Aberdeen or St Andrews rather than assumed by the man himself.

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