

News, Notes and Queries

SOME CASE HISTORIES FROM ASCENSION ISLAND

THE physician of today is aware of the numerous adverse effects and potential hazards of modern drug therapy, and it is both refreshing and instructive to look back to the days when the physician's 'armamentarium' of therapeutic agents was of 'narrow spectrum', and when many of the 'drugs' available were basically only of 'nutritive' value. Such retrospective views, even though they are often brief, can be useful in encouraging the modern medical practitioner to be more discriminating in his prescribing habits.

Several years ago I was able to spend some nine months on Ascension Island in the role of Medical Officer, and although the island was amazingly healthy, even though it was only some eight degrees south of the equator, it had many compensations in the way of medical interest. Situated in the South Atlantic, it was discovered in 1501 by the Portuguese João da Nova and was 'neglected' until it saw the British flag in 1815. Essentially a 'barren' island, Ascension consists mainly of volcanic rocks, and several of the craters carry exotic names. The island has had some distinguished visitors including Halley, Darwin and Dampier (a rather colourful character who combined the roles of navigator and buccaneer, and was wrecked off the island in 1701). Darwin visited in the *Beagle* in 1836 and thought that Ascension was 'like a huge ship kept in first rate order'. The volcanic rocks aroused his geological interest: 'I clambered over the mountains with a bounding step and made the volcanic rock resound with my hammer'. No doubt, he was somewhat disappointed by the paucity of wild life on the island, but may have found some consolation in the vast herds of land crabs that abound there.

Whilst on Ascension I was able to peruse some of the medical case histories dating back to 1878. Ascension has always been a relatively 'healthy' island and thus these early medical histories are of interest as they are an index of imported diseases, and give some idea of the illnesses that were to be seen in the crews of the passing 'East India' ships and warships. The health risks of modern jet-age travel have been well emphasized by Maegraith and others, but even in the mid-eighteenth century, islands were at special risk from imported illness. It should be pointed out that Ascension has no 'endogenous' population, and no significant endemic disease is associated with the island. The early medical case histories were set out in an impressive copper-plate style and contrast greatly with our modern hospital data. It would appear that the physician of those days devoted a major portion of his time to the recording of the various diseases, and most detail was spent on recording the daily clinical findings. In contrast only a few lines were written about the therapeutic aspects, and no doubt this was a reflection of the rather limited range of medication available.

The small hospital in Georgetown was built just after the mid-eighteenth century and admitted some 327 patients during the period of 14 July 1878 to 25 May 1909. Fifty of this number died and this relatively high mortality rate was probably explained in part by the fact that some of the sailors who were treated on the island were admitted in poor general condition after a fairly lengthy sea voyage, and that even when a diagnosis had been made, there was little to offer in the way of active therapy.

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In many of the recorded cases, the physician did not commit himself to any definite diagnosis, but some of the recorded diagnoses included:

Chronic Dysentery	—	19 patients
Enteric Fever	—	18 patients
Melancholia	—	11 patients
'Morbus Cordis'	—	8 patients
Phthisis	—	8 patients
Beri-Beri	—	5 patients
Remittent Fever	—	3 patients
Rheumatism	—	4 patients (3 'Syphilitic' and 1 'Gonococcal')
Pneumonia	—	1 patient
Syphilis	—	1 patient
Scurvy	—	1 patient
Tetanus	—	1 patient

Present-day treatment of chronic dysentery includes the various chemotherapeutic agents. However in 1880 a thirty-eight-year-old marine was admitted to the Georgetown hospital with chronic dysentery—'he passed twelve motions (blood and slime) in the night'. There was no sick pay in those days, and this particular subject was said to have had looseness of the bowels for one month previously—'When in hospital the men lose their pay check money, and this doubtless acts as an inducement to conceal the gravity of their complaint'. On admission the marine was given 40gr. doses of ipecacuanha, but these failed to ameliorate his condition and various other therapeutic routines were tried including 'Chlorodyne', acetate of lead, 'Enemata Opii', Dover's powders and morphine suppositories. Equal attention was given to the patient's dietetic needs and his strength was supported with brandy, eggs, port wine and beef tea. However, the subject died several weeks later. It is interesting to speculate as to the aetiology of the illnesses labelled 'chronic dysentery', and after taking into account the various ports of call of the East India ships one would expect that some of these dysentery cases were probably amoebic in origin. Thus one subject is said to have developed a hepatic abscess, and in contrast to the modern chemotherapeutic approach to this condition with chloroquin and other drugs, the treatment at that time on Ascension Island consisted of 'wheals, astringents, expectorants, blisters and brandy', and the use of expectorants suggests the possibility that some subjects may have had pulmonary involvement. It is interesting to note that ipecacuanha and Dover's powders first appeared in the *Pharmacopeia Londinensis* in 1788, and the alkaloid emetine was discovered by Pelletier in 1817 and placed on the market by Merck in 1831 after Bardsley of Manchester recommended the use of emetine in tropical medicine some two years earlier. During the nineteenth century many efforts were made to produce a 'de-emetised' ipecacuanha since the emetine principle interferes with its use in the treatment of dysentery and other diseases, but these were largely unsuccessful.

Almost equal in frequency to the number of cases of chronic dysentery were the cases labelled 'enteric fever', and again there must be some doubt as to the exact diagnosis in some of these cases, though some of the histories give 'classical' accounts of typhoid, and describe 'rose spots' and other aspects of the disease in detail. Typical 'typhoid' temperature charts are also described. Most would agree that antibiotics

now have an important part to play in the therapy of typhoid, but even in the absence of antibiotics, of the eighteen cases of 'enteric fever' described on Ascension only one patient died. Treatment at that time consisted mainly of 'diaphoretic mixtures' (containing dil. sulphurous acid. and liq. ammonium acetate), milk and beef tea. However, this regime was associated with a rather lengthy convalescence and a sixty-three day stay in hospital was recorded. With reference to the 'enteric fever' and 'chronic dysentery' cases it would appear that at that time public health measures on the island were relatively good, and the Navy had constructed a substantial underground reservoir on the Green Mountain, and from there water was piped to Georgetown several miles away.

It is perhaps a little surprising that only some eleven cases of 'melancholia' merited hospital admission, and no doubt other patients suffering from 'psychiatric' syndromes were given 'occupational therapy' by being employed in the various 'construction' schemes around the island. Life on a small isolated island carries with it some considerable degree of psychological 'stress', and no doubt many sailors must have felt some 'melancholia' after being on a barren volcanic island for any length of time. Again, judging by the amount of alcohol consumed by the Naval crews at that time, one would have expected to find the complications of chronic alcoholism, featuring in the list of diagnoses, but there is little mention of them, and only one definite case of chronic alcoholism accompanied by mental 'confusion' was described. In sharp contrast to our present-day abuse of tranquillisers and antidepressants, the patients with melancholia received the panacea of the day—'milk, wine, brandy and beef tea' plus the ubiquitous Dover's powders, and patients were encouraged to make a hasty return to work. In some cases rather more dramatic therapy was employed. Thus one patient was said to have had an attack of 'apoplexy and insanity' and the physician wrote—'a signal was received from the mountain to say that Mr. Spearing was in a fit—immediately I rode up, taking with me a bleeding lancet and a few grains of calomel. I immediately opened a vein in the left arm and bled what I judged to be 20 oz. I left after having administered, Calomel gr. 5 in milk.' In other cases there appeared to be a suggestion that alcoholism might have played a part in the aetiology of the illness, and in some treatment was restricted to liberal douchings with cold water.

Even in those days the physician was confronted with overdose problems. Thus naval rating Tom Peter 23 years of age was admitted to the hospital in a coma and exhaled a strong aroma of peppermint. It was said that he consumed a bottle of oil of peppermint that originally was intended for equine use. Treatment commenced with a strong infusion of coffee containing eight minims of ammonia, which was administered via a stomach tube, and the subject was drenched with cold water. After some time the patient regained consciousness but was said to smell of peppermint for some ten days!

Many subjects suffered from malnutrition, and although Lind's work on scurvy was recorded earlier, even by 1880 cases of scurvy in naval crews were still being reported. Thus in 1880 one Anton Brodick was admitted to the island hospital. From the captain's account the patient had been ailing for some four months previously (his ship being bound for England after a trip from the Indies). He was admitted

in a state of extreme prostration with marked symptoms of scurvy. His breath was foetid and his body gave off a cadaveric odour. His skin was sallow and covered with petechiae, his gums were spongy and his teeth loose, and the lower extremities oedematous. Treatment consisted of 'beef tea, mutton broth, fresh vegetables, oranges, milk and lime juice', and a linseed poultice was applied to his chest. Although lying in the tropics, Ascension bears little in the way of fresh fruit, and most of the above fruits would have been imported.

With reference to the five cases of beri-beri, it would appear that in the main this was a disease of the ships' crews; and that the condition was rare in the British officers and sailors, thus all the five patients that were mentioned were 'Krumen', who crewed the ships and originally came from Liberia. These patients carried rather exotic names such as 'Jam-Tart', and both 'wet' and 'dry' forms of beri-beri were described. Cardiac details were given in detail, and treatment consisted of 'beef tea'. Two patients died and the physician commented 'the presence of vomiting before death, and the manner of death by cardiac failure point to implication of the pneumogastric (nerve) by neuritis due to the Beri-Beri.' (The post-mortem description suggested that cardiac dilatation was present.)

A case of tetanus was described in a twenty-year-old subject who had a comminuted fracture of the distal phalanx of the left middle finger. He was admitted on 18 March 1884 'and a splint was applied'. It was deemed possible to save the finger and hence 'no amputation at present'. By 25 March 1884 the finger had become gangrenous and was amputated. Later the patient developed 'spasms' and was given chloral hydrate every two hours. However, he succumbed a week later.

Several vague fevers were described and as the Navy had imported goats to the island, there was a possibility that some of the fever cases so described might have been due to brucellosis (there have been reports of outbreaks of brucellosis at sea—the source of infection being goats which had been shipped on at Malta).

If one tends to be a little complacent about the role of insulin and the oral hypoglycaemic agents in modern therapy, it is of interest to note that there was little to comfort the physician who was confronted with a diabetic patient on Ascension. Thus in 1890, a thirty-year-old patient was admitted from H.M.S. *Sparrow*—'he complained of great debility and weakness in his limbs. His mouth was dry, and he complained of a great thirst. Sugar was in the urine. He passes up to 11 pints of water a day.' Treatment consisted of 'dilute phosphoric acid' and 'such modifications of diet as possible in a place like Ascension'.

Surgical procedures appeared to be few in number, and treatment appeared to be conservative. The cases mentioned included a left varicocele, amputation of the finger, fracture of the humerus, and stricture of the urethra. Surgery was often accompanied by a brandy enema. Fistulo-in-ano was treated by 'a lint soaked in carbolic acid', and chloroform was used to amputate a 'gangrenous finger' which developed after a traumatic episode.

On the island, at some distance away from the hospital, lies the somewhat bleak Comfort-less Cove, which consists of a small bay surrounded by an impressive gauntlet of bleak volcanic rock. A short walk inland from this point brings one to a small graveyard, and it is a little surprising to see that of the handful of graves, several

bear the wording 'died of Yellow Fever'. Several appeared to involve young Naval ratings, the deaths of a ship's surgeon and several young marines were recorded. Judging from the distance this small yellow fever graveyard was situated from the main hospital at Georgetown, the inhabitants of the island had some respect for the disease. Presumably subjects developed the disease in either Africa or South America; and no doubt many received a burial at sea. Today there is still much discussion as to whether yellow fever originated in West Africa or South America, but it is well recognized that this disease was imported by ships to Spain and Portugal in the last century. It would also appear that some cases were imported to Ascension and St. Helena, but the hospital records do not appear to include any obvious cases. As an aside the only mosquito found on the island today is *Culex Fatigans*.

Ascension's neighbour, the island of St. Helena, has an interesting medical history, and much of this had been tabulated by Gosse. The island was discovered in 1502, and in 1674 the island surgeon received £25 a year plus the 'right to sit at the Governor's table'. In 1717 Governor Pye noticed that soldiers were dying from 'dysentery', and he ordered that in future soldiers be given 'tea' instead of drinking water (he suggested that the boiled water would be beneficial). Several unorthodox doctors were employed by the East India Company. Thus of one Dr. Du Nay it was said 'he takes at least half a gallon of blood a week from himself. So he is brought so low as we can't expect that he continue long in this world.' In 1742 there was an epidemic on the island—'we have had abundance of mortality on the island. The inhabitants have been seized with a violent distemper very little inferior to the plague, that hath carried off abundance of them . . . they are seized with violent oppression of their stomach and pain in the small of the back and bowels, attended with a strong fever [and] generally die in 4-5 days.' This epidemic might well have been plague as at the time the island was overrun by black rats and ships arrived in St. Helena from the plague ports of India.

In 1807 a slave ship put in at the Cape of Good Hope and infected the colony with measles. From Table Bay she sailed with the homecoming East India fleet and arrived at St. Helena. Precautions were taken, but too late, and after three weeks the island doctors reported several cases of measles. Previously the disease had been unknown on the island. There was a rapid spread of the disease, and no government business took place and all shops closed. The only workmen who were working were carpenters who were making coffins, and only soldiers were available to carry away the dead. Within two months fifty-eight white subjects and 102 black subjects died of the disease, and many more died afterwards. Prior to this time the inhabitants of St. Helena thought that the 'atmosphere' of the island prevented infectious diseases, and with this in mind they refused to be vaccinated against smallpox, but the measles outbreak soon altered their way of thinking. The islanders heard that the vaccine which offered protection against smallpox had been introduced to the Cape of Good Hope. Many desired this protection and Governor Patton sent six healthy boys, selected from Garrison Drummers to the Cape to be vaccinated, and by suitable transfer the process was introduced to the island on their return.

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ACKNOWLEDGEMENTS

The medical case histories referred to are the original MS records now bound in one volume and filed in the hospital on the island. For background information the literature is very meagre, but I have had recourse to the following: *St. Helena* by Philip Gosse, (London, Cassell, 1938); *Six Months on Ascension* by Mrs. Gill (London, John Murray); *Darwin and The Beagle*, by Alan Moorehead (London, Hamish Hamilton, 1969).

I am indebted to Mr. F. Forrest, F.R.C.S., who was Consultant Surgeon on the island during my stay there, for encouraging me to write this account of the case histories.

ALAN MELTZER

SIR JOSHUA REYNOLDS' DEAFNESS

When they judged without skill he was still hard of hearing
When they talked of their Raphaels, Correggios, and stuff,
He shifted his trumpet, and only took snuff.

Oliver Goldsmith of Sir Joshua Reynolds.

My interest was first aroused after reading *The Club* by Vallance (1968) of which Sir Joshua was a member; and *Sir Joshua Reynolds* by Hudson (1958). In the latter there are a number of references to his deafness and his indistinct speech, and Hudson tells me (1969) he had been helped by Dr. Ernest Irons' monograph on *The Last Illness of Sir Joshua Reynolds* (1939). In this monograph reference is made to the deafness, but only incidentally. There are numerous biographies of Sir Joshua Reynolds, and most of them, if not all, make reference to his deafness and indistinct speech, but much is obscure and conflicting.

MEDICAL HISTORY

Pearce-Edgecumbe writes 'In the various lives of Sir Joshua we are told that the scar on his upper lip and his extreme deafness were both attributable, the one to accident and the other to illness occurring during the period of his external travels 1749-52 . . . The fact is, Sir Joshua had a slight hare-lip; and he was not the only one of his family who came into this world with this defect. Two sons of Dean Palmer (Sir Joshua's nephews) have this blemish . . . Indistinctness of utterance is very commonly associated with a hare lip, and Sir Joshua was not exceptional in this respect . . . Such a result of an accident would hardly be what one would expect, though indistinctness of speech is the natural concomitant of a defective palate.' Later he goes on . . . 'there is no doubt that deafness was hereditary in his family, as at least six others have suffered similar deafness coming on at a comparatively early age.' However, James Northcote of Reynolds' travels in Minorca writes 'At this time it was, I believe that his lip was so much bruised as to oblige him to have a part of it cut off, from whence arose that apparent contraction which Mr. Edwards supposed to have been owing to his subsequent illness at Rome, which brought on his partial deafness.' These are but two examples of the various views, which have been put forward by authors, and the cause of Sir Joshua's deafness may be summarized as either: (1) hereditary nerve deafness; (2) otosclerosis; (3) conductive deafness due to cleft palate; (4) middle-ear disease.

COMMENTS

If a review of modern knowledge is made together with the available information