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GEORGE JAMES GUTHRIE, F.R.S.
(1785-1856)

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BRITISH MASTERS OF OPHTHALMOLOGY SERIES

9.—GEORGE JAMES GUTHRIE, F.R.S., (1785-1856).

Founder of the Royal Westminster Ophthalmic Hospital

BY

HAROLD GRIMSDALE,

LONDON

George James Guthrie, the subject of this short memoir, is rightly held by all British ophthalmologists as one of the founders of their science. Yet if we regard him, as we ophthalmic surgeons are apt to do, as primarily one of our own members, we shall lose sight of what is by far the largest part of his life work. Guthrie was perhaps the most distinguished army surgeon that has ever served in our forces, and if, incidentally, during that career he strove for ophthalmology, it was but for a part of the greater whole.

Here, in these pages, in recalling our debt to Guthrie, we shall naturally pay more attention to his ophthalmic work than to his contributions to general surgery; these have been written of elsewhere in the Journal of the Royal Army Medical Corps, 1910, and in the British Journal of Surgery, Vol III, 1915-1916.
G. J. Guthrie was born on May 1, 1785. His family was connected with the medical profession; his great grandfather had been present as surgeon at the battle of the Boyne, and his father assisted and succeeded his maternal uncle (who had been a surgeon in the Navy) in the manufacture and supply of medical stores, more especially of an improved form of emplastrum lithargyri, from which he made a considerable fortune.

Guthrie's education was undertaken, in part at least, by the Abbé Noel, a French emigré, and from him Guthrie acquired so good a knowledge of French that he was sometimes mistaken for a native of France. During his fourteenth year, as the result of a serious accident, he came under the care of Mr. Rush, then Inspector-General of military hospitals, and he, taking an interest in the boy, proposed to his father that he should be educated for the profession of medicine. As a result of this suggestion, Guthrie was articled as pupil of Mr. Phillips, of Pall Mall, and the particular pupil of Dr. Hooper, of the Marylebone Infirmary. In 1800, being then but 15, he was appointed hospital mate and dresser under Mr. Carpue, surgeon to York Hospital, Chelsea, and staff surgeon to the Army (1798-1807). His knowledge of French, and the interest in foreign languages, which he imbibed from the Abbé, served him in good stead in the Peninsula in later years.

In March, 1801, an order was issued that no unqualified hospital mate should attend the sick in these hospitals; on hearing of this order, Guthrie immediately put down his name for examination, and two days later was examined and passed. He was very shortly after appointed to the surgery of the 29th (now the Worcestershire) Regiment, and accompanied them first to the American and afterwards to the Peninsular War. His Colonel was only 22, and Guthrie was but 16, yet the command of the regiment and its medical appointments were as efficient as any in the Army. Guthrie served throughout the whole of the Peninsular War. He was wounded at Vimiero, and again at Oporto, and was invalided for some time from fever. At the passage of the Douro his gift of languages was of service to him; he was enabled to persuade a Portuguese peasant to ferry him across the river, and it is said he was the first mounted officer across. On the far side he met a French gun entangled in a narrow lane, and by cutting the harness he prevented its removal. In doing this he became separated from his regiment, and therefore attached himself to a battalion of Portuguese. In their company he met an English regiment, who, mistaking the uniform for French, were about to open fire; Guthrie, running forward, tore open his great coat, and showed under it his scarlet tunic; this was recognized by the English, and what might have been a disaster averted.
At Albuera, he was sole medical staff officer in charge of 3,000 wounded. In 1812 he was appointed Deputy Inspector of Military Hospitals. When Sir Rowland Hill withdrew from Madrid to Salamanca, Guthrie conducted the retreat of the Hospital train, and although the stores were lost, the Hospital and all the sick were saved; it was the first time that a British army had made so long a retreat without losing its Hospital and sick. After this action, Guthrie was highly praised by Wellington for his skill and care. The regiment also appreciated Guthrie's ministrations; it is said that they had good reason to do so as the death rate was but half that of many of the other regiments, and the men attributed this to Guthrie's attention.

He always strongly advocated the principle of regimental hospitals; he held that the men were not only better looked after, but that they were returned to their regiments more speedily. It was largely Guthrie's professional skill and organizing ability which gained for the surgeons of the British Army that high reputation which they enjoyed among all surgeons of that time. Guthrie established the practice of ligaturing both ends of a wounded artery in preference to the Hunterian operation of tying it above the injury, and thus saved many limbs.

In 1814 he returned to England and was at once put on half pay. He renewed the study of anatomy at the school in Windmill Street (the old building is still standing) and attended the practice of the Moorfields Eye Hospital (then the London Infirmary for the Cure of Diseases of the Eye).

When Napoleon escaped from Elba and began the campaign that ended at Waterloo, Guthrie did not feel able to abandon his professional work in London, since this would have involved the cessation of the help which he was giving to his family, and therefore did not at once join the Army, much to the regret of his brother officers. However, after the Battle of Waterloo, urged by his old chief, Sir James McGrigor, he left England for Brussels to put his skill at the disposal of the medical officers there. It is said that his action in leaving London gravely offended the only two patients he had, who refused ever to speak to him again. Under these circumstances his future, on his return to England, appeared dark indeed, but his friend, Sir James McGrigor, gave him charge of two large wards in the York Hospital in London, and the fame of Guthrie increased rapidly as the success with which he treated the desperate cases sent him became known.

He felt deeply the necessity for greater opportunities of instruction for the medical officers of the Army, and therefore began a course of lectures to which all officers of the services were welcomed without fee. At the conclusion of the first course the grateful audience presented him with a silver cup as "an inadequate but
sincere memorial of their admiration of his great professional ability." This cup passed into the possession of his daughter, Miss Guthrie, and was presented by her to Mr. Henry Power, who had been a student of her father; it is now in the possession of Mr. D'Arcy Power.

Guthrie was specially struck by the absence of any systematic instruction on the subject of diseases of the eye, and by the slender provision in London for the treatment of these conditions. Moorfields was the sole special hospital; a similar institution "under Royal Patronage in Westminster," opened in the winter of 1804-1805, appears to have collapsed. This brings us to the action which must always be the chief claim on our remembrance, viz., the foundation of the institution which is now the Royal Westminster Ophthalmic Hospital. This was first mooted by Guthrie little more than a year after Waterloo. His acquaintance with the heads of the Army and their knowledge of his services, ensured for the venture its primary support. The first public notice of the proposed infirmary is in the Morning Chronicle for Saturday, Dec. 7, 1816:

"THATCHED HOUSE TAVERN, 5th Dec., 1816.

The Right Honourable Lord LYNEDOCH in the Chair.

At a numerous MEETING of NOBLEMEN and GENTLEMEN, it was proposed to establish an INFIRMARY for the CURE of DISEASES of the EYE in the Western part of the Metropolis, for the Relief of the Poor and as a School of Instruction; certain Resolutions were adopted to promote this important object and a Committee appointed to make the necessary arrangements for the establishment of the Institution.

Patron—His Royal Highness the Duke of YORK, K.G.

President—His Grace the Duke of WELLINGTON, K.G.

That a Committee be formed for the purpose of regulating the affairs of the Institution, who will report their proceedings to the next General Meeting of the Governors.

President, Lord Lynedoch. Members, Sir Thomas Bell, S. Reed, Esq., Treasurer, Dr. C. F. Forbes, G. J. Guthrie, Esq.

That the Medical Officers of the Establishment consist of one Physician, viz., Dr. C. F. Forbes, Member of the Royal College of Physicians, Physician to his Royal Highness the Duke of Kent, and to the Surrey Dispensary, Deputy Inspector of Military Hospitals, etc., etc.; and of one Surgeon, viz., Mr. Guthrie, Member of the Royal College of Surgeons, Deputy Inspector of Military Hospitals, Lecturer on Surgery in London, etc., etc.

That to give immediate effect to this Institution, the poor will be relieved, until a proper place can be provided, on Mondays, Wednesdays and Fridays, between the hours of half-past nine and
eleven o'clock, at Mr. Guthrie’s house, No. 2, Berkeley Street, Berkeley Square.”

The original title of the charity was the “Royal Westminster Infirmary for the cure of Diseases of the Eye.”*

The hospital was first placed in Mary-le-bone Street, Piccadilly (which is now the eastern part of Glasshouse Street), and afterwards in Warwick Street, Golden Square; finally, in 1832, it was removed to its present site under the title of the “Royal Westminster Ophthalmic Hospital.” It soon proved of great value to the poor. It was stated at a meeting of the Governors in May, 1825, that some 10,000 poor people had already received attention there, and the Director-General, Sir James McGrigor, drew attention to the fact that the Institution was the chief teaching centre for the officers of the Army Medical Service in this special subject. On the same occasion the Duke of Wellington spoke highly of the value of the work. Guthrie’s interest in the better education of the Army medical officers has been already mentioned. In the charter of the hospital it is specially laid down that all members of the medical services of the Army or Navy are to be admitted to the practice of the hospital and to the systematic course of instruction without fee. Guthrie himself gave the systematic lectures for many years, and the rule which, there is little doubt, he made, still binds the staff.

For the first ten years, Guthrie and his colleague Forbes were the sole medical officers; in 1827 Forbes retired, after an unfortunate disagreement with his colleague; there was great feeling over the affair, and Forbes fought a duel with one of the pupils of the Hospital on Clapham Common. The details of the quarrel may be found by those interested in the *Lancet*, but cold controversy is dull reading. Guthrie was hurt by the expressions of the *Lancet*,† and threatened an action for libel, which eventually he did not proceed with. Clarke, in his Recollections, adverts to this point, says that, in the opinion of his contemporaries, Guthrie would certainly have secured heavy damages, but adds that he was as adverse to pressing his personal grievances as he was indefatigable in fighting for anything which he believed to be for the public good.

About this time, May, 1827, Guthrie was elected a Fellow of the Royal Society, being described as “a gentleman well versed in various branches of natural knowledge.” The certificate is signed by his friend Henry Kater and eight others.

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* It is not clear whether this had any relation to the similar Institution mentioned above.

† The *Lancet* cannot have felt very easy in the matter, for the Editor wonders that Guthrie should have been disturbed by “such a contemptible squib” as the effusion of their own correspondent, but appeals to the freedom of the Press to justify the publication of it.
From 1827 to 1838 Guthrie carried on the work of the Hospital singlehanded; in that year the staff was increased by the addition of his son, Charles Guthrie, and they carried on (with the assistance of Mr. Knox, the "Honorary Cupper") until 1841.

It was not in the betterment of Army medical education alone that Guthrie was a pioneer.

In another direction, also, he was in advance of his time; I have before me a copy of a small tract entitled—

ON
THE CERTAINTY AND SAFETY
WITH WHICH
THE OPERATION
FOR THE
EXTRACTION OF A CATARACT
FROM
THE HUMAN EYE MAY BE PERFORMED,
AND
ON THE MEANS BY WHICH IT IS TO BE ACCOMPLISHED.

BY G. J. GUTHRIE, F.R.S.

WITH REMARKS BY CAPTAIN KATER, F.R.S.,
ON
CERTAIN SPOTS DISCOVERABLE
IN
THE HUMAN EYE
AND ON
THE MANNER OF DETECTING THEIR SITUATION.

This is "published by order of the Committee and sold for the benefit of the Royal Westminster Ophthalmic Hospital."

The chief interest is found on the second page of the title; there it is described as "the first special report" of the Hospital "on particular diseases and operations," and is dated 1834. He thus anticipated the foundation of the Moorfields Hospital Reports by nearly a quarter of a century.

Unfortunately, the records of the Hospital are very scanty, and I have not been able to find any details concerning this report, nor why it was not followed by others. There are several points of interest in this Report; the first is the bold advocacy with which Guthrie strived to establish the operation of extraction. His clinical experience taught him the advantage of the operation over either couching or discission in cases of hard cataract, and he had the courage to urge this when the majority of the profession were adverse. Secondly, "there is another secret to be disclosed of yet greater importance to the young operator; it is that the effect of an injury to the iris is very greatly over-rated." He shows that
a wound of the iris during the section of the cornea was of comparatively little importance; but he explains how injury to the iris may be avoided by a movement "to raise the eye, or in other words to draw it as it were out from the orbit," at the same time pressing on the cornea. He then goes on to show how a large quantity of vitreous may be lost without any serious damage, and quotes cases where, after the section was made, the lens was expressed from the eye by the action of the external muscles together with a large proportion of the vitreous, and yet a good result followed.

I have extracted somewhat freely from this little work, because it shows how fully Guthrie gave his knowledge to his pupils.

It is clear that he was an enthusiastic teacher, with a genuine love of his work, and there is therefore no cause for wonder that his pupils valued his teaching.

It seems probable that his great professional activities interfered with the publication of succeeding "Reports," as they seem also to have prevented the publication of the lectures on the anatomy of the eye which Guthrie promises in his book on the surgery of the eye, published in 1823; this was the first part of his lectures at the Royal Westminster Ophthalmic Hospital, and it is to be regretted that the second part, consisting of the lectures on the anatomy of the eye and the diseases which did not admit of operation, never saw the light. The lectures were probably given from brief notes only, and the labour in arranging them for publication was too great an addition to his strenuous life. In the section on cataract, there is the first mention of the zonular form; this he describes as a small lens, but from the description and the plate, there can be no doubt of the real fact.

Guthrie was three times President of the Royal College of Surgeons, viz.: in 1833, 1840, and 1854. He suggested the publication by the College, of "Transactions," but this, like the "Reports" of the Royal Westminster Ophthalmic Hospital, came to an early end. Guthrie prepared a paper on hernia, to be read to the Museum Committee, but the minutes report that no quorum was obtained and the lack of interest smothered a valuable project.

Guthrie died on his birthday, May 1, 1856.

Of his work on general surgery, I do not propose to speak at length. Let it suffice to say that the treatise on Gunshot Wounds is still read with attention; the Librarian of the Medical Society tells me that a copy in that library has been constantly borrowed by surgeons in France during the present war; this is a tribute to a work which is now more than one hundred years old.

Guthrie's skill was recognized by his contemporaries; he seems to have been a man of considerable strength of character, rather hot-tempered and irascible, but with a great and real kindness of
heart. It is recorded that he was feared as an examiner, because of his brusque manners, but that he was, in truth, less severe than many of his colleagues. His firmness in pursuing what he believed to be for the public good, as well as his disregard for his own private wrongs, has been mentioned by all his contemporaries.

There are many portraits of him; the best known, that in the Secretary’s room at the Royal College of Surgeons (reproduced also in Pettigrew’s Medical Portrait Gallery), is not the most pleasing.

The bust by Chantrey, in the Gallery, gives the impression of a much finer man, with a large outlook and wide sympathies. The bust in the “Guthrie” Ward of the R.W.O.H. is not a successful work of art.

A very life-like little sketch (reproduced here) is to be found in the Lancet for 1850.

I have to thank Mr. D’Arcy Power and Professor Keith for their kind help in the collection of material on which this short memoir is based.

COMMUNICATIONS

ON MAXIMAL INSTILLATION OF COCAIN AND OF ESERIN IN CATARACT EXTRACTION

BY

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Operating for cataract in Sind, Northern India, during the past two years, local conditions have been largely responsible for a number of departures from the accepted routine procedure. Two of these changes are well worth consideration as valuable measures for at least occasional adoption elsewhere.

Prolonged instillation-period of cocaine and adrenalin: Sindhis as a whole strike a lower average in self-control during operation than any body of patients which I have yet met. They are timid, suspicious, and bear pain badly. Consequently operations with only the usual preparation of the patient are too frequently nerve-wracking ordeals for the surgeon, and are unfair to the patient. One is forced to operate as frequently as possible under the full, or nearly full, influence of cocaine. The stage reached in anaesthesia of the iris may be gauged fairly well by the degree of dilatation of the pupil attained under the combined instillation of adrenalin and cocaine. As a general rule the dilatation must be rather wide if the patient is to be guaranteed free from pain on pulling or rubbing the