

LECTURES
ON THE
OPERATIVE SURGERY
OF THE
EYE.

LECTURES

ON THE

OPERATIVE SURGERY

OF THE

EYE:

BEING THE SUBSTANCE OF THAT PART OF THE AUTHOR'S

Course of Lectures

ON THE

PRINCIPLES AND PRACTICE OF SURGERY

WHICH RELATES TO THE

DISEASES OF THAT ORGAN:

PUBLISHED FOR THE PURPOSE OF ASSISTING IN BRINGING THE MANAGEMENT
OF THESE COMPLAINTS WITHIN THE PRINCIPLES WHICH REGULATE
THE PRACTICE OF SURGERY IN GENERAL.

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TO
THE PRESIDENT,
THE DUKE OF WELLINGTON, K. G.

AND
THE VICE-PRESIDENTS
OF
THE ROYAL WESTMINSTER INFIRMARY

FOR
The Cure of Diseases of the Eye,

TO WHOSE KINDNESS AND LIBERALITY THE INSTITUTION IS
PRINCIPALLY INDEBTED FOR ITS ORIGIN AND SUPPORT,

THIS WORK
IS RESPECTFULLY INSCRIBED,

BY THEIR
VERY OBEDIENT AND HUMBLE SERVANT,

G. J. GUTHRIE.

P R E F A C E.



PREVIOUSLY to the year 1817, no lectures were delivered in Great Britain on the Diseases of the Eye, unless the concise observations, which were made in the schools of anatomy, on some of the operations, be considered as such. The consequence was, that a knowledge of these complaints was not presumed to form a part of the education of a surgeon; and the public, in applying for relief to those gentlemen who made this branch of the profession their only occupation, encouraged rather than repressed a propensity to idleness, which so frequently induces mankind to neglect that which does not appear to be immediately necessary, or which is not directly required. The various casualties of a protracted war, in distant climates, which rendered it imperative on many of the physicians and surgeons of the army and navy to pay greater attention to the diseases of the eye, together with the impulse given by the application and success of the late Mr. Saunders, gradually, however, began to cause some change in the ideas of medical men; and, at last, to convince many of the propriety of their acquiring a knowledge of these diseases by the same means, and in the same manner, as were found essentially necessary in the study of

medicine and surgery in general. In order to remove some of the difficulties which impeded the progress of practitioners, and to render an acquaintance with these complaints more easily attainable by students, Lectures on the Anatomy and on the Diseases of the Eye were commenced by Dr. Forbes and myself, shortly after our appointments as Physician and Surgeon to the Royal Westminster Infirmary for Diseases of the Eye, in Marylebone Street, Piccadilly; which, whilst they were separated from our respective courses of Lectures on the Principles and Practice of Physic and Surgery, were yet founded on the same principles, and on the same general reasoning, and were elucidated by examples drawn from other parts of the body. The following observations form a part of the Lectures which were allotted to me, and are now published at the urgent desire of a great body of students, who were solicitous to have an opportunity of reviewing those opinions more at leisure, and of referring to them when they might stand in need of assistance. They felt the want of a work which, whilst it noticed the doctrines and practice of the several writers on the subject, should yet state the facts, and impartially discuss the opinions of each, so as to obviate the necessity for purchasing several books on the same subject, merely because each author has chosen to recommend only his own practice, or methods of operating. In the observations I have found it necessary to make for this purpose, I have avoided as much as possible entering into controversy; and where I have thought it right to combat the opinions of either the dead or

the living, I have endeavoured to do it with liberality. Where I have differed with my contemporaries, I have frequently done so without any direct reference to them; and if I could have devised the means of explaining myself in an intelligible manner in all cases without it, it would have been peculiarly agreeable to me to have availed myself of it.

A knowledge of the diseases of the eye cannot be acquired from lectures alone, or by reading; it is necessary to study them by diligent examination, and an attentive observation of the individual who is the subject of them. This can only be done at an hospital or an infirmary, where the opportunities are numerous; but then a competent acquaintance with them may be obtained in a few months, and with very little comparative labour. The diseases are nearly all open to inspection, most of the changes are under observation, and the effects of disease may almost always be predicted, if they cannot be prevented.

Public opinion, which on medical subjects is generally erroneous, although for the most part founded on professional authority, is in no instance more injurious than in relation to the eye. It pronounces it to be an organ of a very delicate nature, exquisitely sensible, requiring the greatest delicacy of touch, and the utmost nicety of management; which opinion some oculists formerly found it convenient to support, and which the public may still

continue to believe without any great disadvantage ; but students in surgery must be taught otherwise. They must learn, that the eye is not a delicate organ, that it will suffer more comparative violence, with less injury, than any other of importance in the whole body ; that, so far from being exquisitely sensible, it is, when exposed in a healthy state, nearly the reverse, only becoming permanently so on the occurrence of inflammation ; and that the ablest and most successful operators are neither the most gentle nor the most tender in their proceedings. The opinion of the exquisite sensibility of the eye has arisen from the pain which is felt on the admission of a small piece of dirt, or a fly, between the eyelids ; but this occurs from a wise and preservative provision of nature, on account of the insensibility of the eyeball itself. Let the eyelid be raised, and the same piece of dust applied to the surface of the eye, no pain, and scarcely a sensation, will be produced : remove the piece of dirt, turn out the lid, and whilst it is retained everted, place the piece of dirt upon it, no greater sensation will be induced than is felt when it is applied to the eyeball. The inference is, that both surfaces, when touched separately, are nearly insensible to this species of irritation. But let the same piece of dirt be put between the eyelid and the eyeball, and the sensation produced is exquisitely painful. To give rise to this sensation it is necessary that the two surfaces should come in contact, and that the foreign body be grasped between them. If this were not the case, an irreparable injury would

often occur to the transparent part of the eye before it would be observed; and if the raising of the lid and the separation of the surfaces did not nearly annul sensation, an operation could not be performed for cataract; for, who could bear quietly the sensation which must arise from pushing a needle into the eye, if it were analogous to that arising from a fly or dry solid substance between the eye and the lids? The experiment may be tried in a very simple and conclusive manner by any one on himself, by merely keeping the lids apart by an effort of the will, when the end of the finger may be placed boldly on the eyeball without any inconvenience. Inflammation, by enlarging the vessels, gives rise to pain in the same way, and the sensation is at first as if some extraneous matter were interposed between the lids.

In regard to the difficulty supposed to attend the performance of operations on the eye, it partakes of the same error, and has been supported for the same reasons. The sensibility presumed to exist in the organ, naturally led to the conclusion that the operations required to be performed upon it must be difficult of accomplishment; and the science of optics, in showing the beautiful arrangement of its structure and the complexity of its functions, induced a belief that the slightest alteration in its composition must be fatal to its mechanism: but this is not found to be the case. Few persons can, however, duly estimate the liberties that may be taken with the eye until they have seen

several operations performed, when the false ideas they have imbibed will be completely removed, and new feelings will arise, in admiration of the benignity of the Creator, who, in rendering the eye-ball nearly insensible, enabled it, in its quiescent state, to undergo those operations which are frequently necessary for the recovery of sight.

It has also been supposed that there is a peculiar tact, or something indefinable, required in the hands of the surgeon, to enable him to operate with advantage, and that the performance of operations on the other parts of the body unfits him for those on the eye: that this may be the case in London, ~~I do not mean~~ to dispute, and I have no wish that the public should change its opinion; but students must not suffer themselves to be deceived. The surgeon who can perform an operation, with that precision which enables him to lay bare and avoid a part the division of which would cause the death of the patient, possesses coolness enough to operate upon an eye, the loss of which is comparatively of little consequence. The capability of dissecting within an eighth of an inch of the death of a patient, or more frequently of his future discomfort and misery, is only acquired by habit, or in other words, by practical labour and study. A knowledge of the different operations on the eye must be acquired in the same manner. A student having the advantages of a cool head and a steady hand, will, with a due share of study, perform an operation on one part of the body just as well as on another.

He may never perform them well on any part, but that is dependent on other causes, which would not be removed by his confining himself to one operation. Practice for such persons will do nothing; for a man who can perform other operations well, it will do every thing. There are a great many surgeons in Europe, there are but few good operators, and principally for want of opportunity; for no man can know what he is capable of doing until he makes the experiment. If he cannot operate well himself, he may still, by a knowledge of disease, prevent the necessity of its being done by others.

The Lectures on the Anatomy, and on the remaining Diseases of the Eye, will follow the completion of a work in I have been for some time engaged, on the Diseases of the Urethra.

2, Berkeley Street,
Berkeley Square,
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