

should be provided with a well organized and fully equipped sanitary staff. The policy of employing honorary Chairmen is a mistake as they have too many interests to look after and speaking plainly, it would be more than human to expect them to sacrifice their time and energy in looking after municipal affairs which is generally regarded as a thankless work or to safeguard its interest when these clash with their own."

SPECIAL ARTICLE.

SMITH'S OPERATION FOR CATARACT.

IN our May issue we gave a number of extracts from various American writers on Smith's operation for the extraction of cataract within the capsule. The April issue of *Ophthalmology* (vol. vi, No. 3) published in Seattle, U. S. A., has several articles showing the widespread interest in the subject. Prof. Elschmig of Prague, wrote an article at the invitation of the Editor Dr. Würdermann, he begins by stating that the operation within the capsule is as old as extraction itself and that it was first done in 1773 by Sharp and Richter. The term *expressio lentis* was used by Christiaen in 1845 and was much used as all know by A. and H. Pagenstecher, and Prof. Elschmig will only admit that Smith's operation differ from that of Pagenstecher "only in minor details."

He goes on to say that he has given the "Expressio Lentis according to Smith" both with and without iridectomy an impartial trial in 69 cases. He places no reliance on "*expressio lentis without iridectomy*" in such cases he experienced iris prolapse in 25 per cent. of cases and vitreous prolapse in 17 per cent. (He says his figures in simple extraction with capsulotomy are vitreous loss only 0.7 per cent, iris prolapse only 5.6 per cent.) He practised "*expressio lentis with iridectomy*" in 39 cases and soon formulated the following rule for his own guidance—"Continue the expression only when the edge of the lens appears in the wound on light pressure."

In spite of choice of cases Elschmig had 27 per cent. of vitreous loss and he regards vitreous loss "under certain circumstances as extremely dangerous for the integrity of the eye, for vitreous opacities are sure to remain. In addition to these "unpleasant consequences" eyes operated on by this method heal slower, he says, ...and suffer "chorioidal detachment at least ten times as frequently" as those operated on with capsulotomy. He further says that he was forced to the conclusion that the "*expressio lentis with iridectomy* is suitable only for a small number of cases, and those are the cases in which it can, perchance, be easily carried out." He then says that to explain "the wonderful results of Smith" there may be a "racial characteristic of minimal adherence of the lens capsule to the fossa patellaris." In conclusion, he considers Smith's operation "an exceptional procedure."

In another article in the same Journal (p. 357) Dr. J. W. Wright, of Columbus, Ohio, describes his method of operating within the capsule which he has practised, he tells us since 1879 and two years ago he was surprised to learn that an "East Indian oculist" (so Colonel Smith is disguised) was "removing lens as a new procedure."

Dr. D. W. Greene, of Dayton, Ohio, writes from Jullundar, dated 18th November 1909, to the Editor, *Ophthalmology*—in which he says that "Clark of Columbus was here (Jullundar) for some three weeks and did 150 operations and left highly pleased with his experience and is a Smith man now." Vail did 350 operations with a vitreous loss of less than 5 per cent. and is a thorough convert to the Smith operation *as I call it.* He then goes on to point out that Smith's operation is neither Pagenstecher nor Mulroneys. "No description by Smith's pen or any other can convey much idea of Smith's manipulation and technique with a vitreous loss as low or lower in his hands than by the old method." Dr. Greene then says that the great future of the operation is for immature lenses "*for these it is the best and superb operation.*" (Italics in original.) At page 446 of *Ophthalmology*, there is an extract from a paper by R. Sattler of Cincinnati, on his first ten cases and A. R. Baker also reports ten cases which we need hardly further refer to Dr. C. F. Clark reports (*Arch. Ophthalm.*, January 1910) on his visit to Smith's clinique, when he did 121 extractions out of 245 done. He states that the operation is not easily understood from any written description, that the peculiarities of the patient do not account for Smith's success, and that *when properly performed* loss of vitreous is neither frequent nor dangerous. Attention to detail is absolutely essential to success.

The same issue of *Ophthalmology* also gives synopses of Captain Lister and Major Birdwood's articles on Smith's operation. Again in *North West Medicine*, published at Seattle, Washington, U. S. A., we find another article by Dr. Würdermann, of Seattle on Smith's operation 45 cases, in which the writer considers he got better results in 45 cases operated on, *a là* Smith, than in the 1,000 previous operation done by him by older methods, he emphasises the need of the *tactus eruditus*.

An interesting discussion followed, and the remarks of Dr. N. D. Pontius are particularly interesting:—

He referred to Jullundar (we may now say Amritsar) as a Mecca, he visited Smith's clinique and saw Smith do 250 cataracts in about ten days and was duly impressed, but points out the difficulty of getting clear ideas as to the ultimate visual results. Dr. Pontius states that he saw some 70 of the patients soon after the operation, and fully 10 per cent. of them had "incarceration or prolapse of the iris" and as many had evidence of iritis. After leaving

Jullundar Dr. Pontius visited Major Kilkelly's eye hospital (the C. J. O. Hospital, Bombay) and there saw 24 of the cases operated on by Lieutenant-Colonel Smith at the time of the Bombay Medical Congress (see paper by Kilkelly, *I.M.G.*, May 1910). He spent half a day examining there in a dark room. Of Smith's 24 cases the corneal wound was incompletely closed in six cases; in two there was prolapse of iris, in three incarceration of lens capsule; in six cases opaque pupillary membranes; nine cases showed evidence of having had iritis and six had still ciliary injection, in five cases the pupillary membranes prevented a view of the fundus—there was three weeks after the cases had been operated on by Lieutenant-Colonel Smith. He points out what seem to him the great disadvantages of the operation, *viz.*, the loss of vitreous, the rupture of the capsule itself, and the prolapse or incarceration of the iris; the only advantage in the operation *à la* Smith, is in premature cases, "where the patients greatly needs his vision and being informed of the increased danger consents to take the chance."

In the *Ohio State Medical Journal* (April 15th, 1910) will also be found an interesting discussion on this operation which, as Dr. Louis Stricker of Cincinnati (author of the standard work on the *Crystalline Lens*) said "is holding the stage all over the United States and not only there but all over the world." Dr. Millette, of Dayton, opened the discussion in a paper, which may be summed up in Dr. Millette's words. "It is the operation of choice in adult immature cataract." It has its unfavourable side, it needs a trained assistant, it demands a greater degree of skill, there is greater violence done the eye, there is loss of vitreous to be accounted for and a less slightly pupil. Over against this there are four considerations, *viz.*, permanent disposition of the capsule and its contents; no secondary operation; post operative complications practically nil and "*better vision*" (italics are in the original.)

Dr. D. W. Greene demonstrated the operation *à la* Smith, on which Dr. F. Allfort of Chicago, opened the discussion and referred to the "Major Smith Colony" at Dayton. Dr. Allfort said he would allow Major Smith or Dr. Greene to operate on his eye in this method, but no lesser man, and he emphasises the fact that this operation is not for the man who does no more than 25 cataracts a year. Other speakers spoke of these various experiences and Dr. D. T. Vail quoted Dr. Greene's rule when the vision at best falls to 20/100 operate, and do it by the Smith method," *i.e.*, in the immature stage.

In addition to the above the June issue of that excellent monthly review of current work "*The Ophthalmoscope*" has many pages devoted to the Smith operation. Dr. Derrick T. Vail above quoted writes enthusiastically and less critically of his "impressions gleaned during a

recent visit to Jullundar Smith's clinic." He gives ten useful points of technique in the operation and says "it is to-day the best operation in cases of immature cataract and fortunately it is easy to perform in such cases. It is totally unfit for congenital or juvenile cataracts." For ordinary senile cataracts he avoids the real question by saying "it is the best for the people of India." This is the result of his seeing 1,200 operations in this way.

The *J. A. M. A.* (July 23, '10) contains another discussion on this operation, introduced by Dr. G. C. Savage, of Nashville, who claims to have introduced a new "cataract in capsule" operation, the five steps of which he is at much pains to claim "as mine," Dr. D. W. Greene defended the operation "of that great man, Colonel Smith" (*J.A.M.A.*, p. 292).

Correspondence.

THE STUDY OF PROTOZOOLOGY

To the Editor of "THE INDIAN MEDICAL GAZETTE."

SIR,—I am writing to direct the attention of Medical Officers who are desirous of studying Protozoology to the excellent facilities afforded by the Imperial College of Science and Technology, South Kensington. The College is in Exhibition Road on the site of the old School of Mines.

The Zoological Section is under Professor Adam Sedgwick, F.R.S., and the lecturer on Protozoology is Mr. C. Clifford Dobell.

Mr. Dobell's lectures are divided into two courses: the first, delivered from the middle of January to the end of March is on Cytology; and the second course from the middle of April to the end of June, on Protistology. The two courses are independent of one another. The special feature of both is the opportunity afforded for, and encouragement given to practical work.

Mr. Dobell's reputation is a sufficient guarantee of the excellence of the instruction given; and his unrivalled practical knowledge of Microscopic technique, and Protozoological literature is most generously and freely placed at the disposal of students, whether beginners or advanced Protozoologists. The laboratory is very well equipped, and reagents and material for work are supplied with a lavish hand. The fees for the courses are purely nominal ones.

My own experience at the College has been such a happy one, and I am under such a great debt of gratitude to Professor Sedgwick and Mr. Dobell for their kindness and help, that I feel that I am doing a good service to my brother officers, and others who wish to keep in touch with modern Protozoological knowledge, by informing them of what they may expect at this College.

To any one desirous of further information, I recommend an application for a prospectus to—

The Secretary,
Imperial College of Science and Technology,
South Kensington,
London.

I am, &c.,
H. J. WALTON, F.R.C.S.,
Major, I.M.S.

LONDON,

LIEU-COL SMITH'S REPLY TO MAJOR P. P. KILKELLY.

To the Editor of "THE INDIAN MEDICAL GAZETTE."

SIR,—Major Kilkelly's letter in your September issue I would decline to reply to were it not that he introduces new matter.

To answer his letter would be to deal in generalities. I shall get into closer quarters than that with him in an early issue of the *Ophthalmic Record* of Chicago in which those interested in the 23 Bombay cases will be able to see the other side of them.