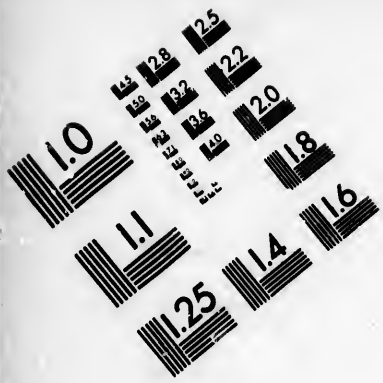


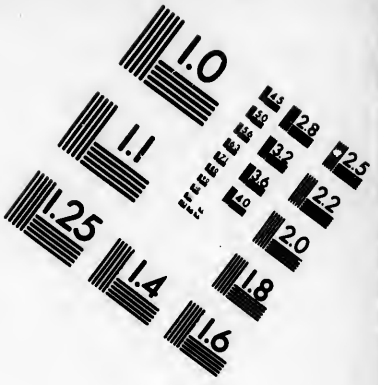
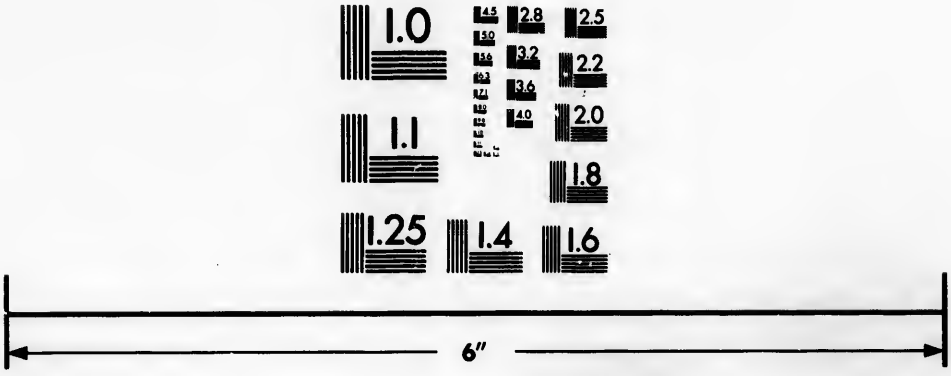


IMAGE EVALUATION
TEST TARGET (MT-3)



Photographic
Sciences
Corporation

23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503

Technical and Bibliographic Notes/Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

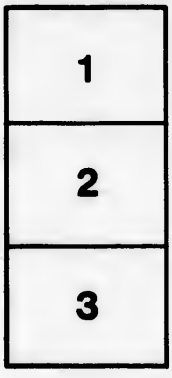
L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

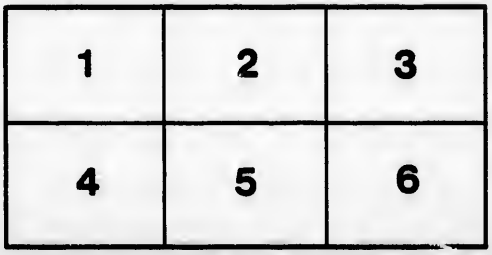
- [x] Coloured covers/ Couverture de couleur
- [ ] Covers damaged/ Couverture endommagée
- [ ] Covers restored and/or laminated/ Couverture restaurée et/ou pelliculée
- [ ] Cover title missing/ Le titre de couverture manque
- [ ] Coloured maps/ Cartes géographiques en couleur
- [ ] Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire)
- [ ] Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur
- [ ] Bound with other material/ Relié avec d'autres documents
- [ ] Tight binding may cause shadows or distortion along interior margin/ La reliure serrée peut causer de l'ombre ou de la distortion le long de la marge intérieure
- [ ] Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/ Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- [ ] Additional comments:/ Commentaires supplémentaires:

- [ ] Coloured pages/ Pages de couleur
- [ ] Pages damaged/ Pages endommagées
- [ ] Pages restored and/or laminated/ Pages restaurées et/ou pelliculées
- [x] Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
- [ ] Pages detached/ Pages détachées
- [x] Showthrough/ Transparence
- [ ] Quality of print varies/ Qualité inégale de l'impression
- [ ] Includes supplementary material/ Comprend du matériel supplémentaire
- [ ] Only edition available/ Seule édition disponible
- [ ] Pages wholly or partially obscured by errata slips, tissues, etc., have been refilmed to ensure the best possible image/ Les pages totalement ou partiellement obscurcies par un feuillet d'errata, une pelure, etc., ont été filmées à nouveau de façon à obtenir la meilleure image possible.

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
							✓				





EXCISION OF THE EYEBALL AND SOME ALTERNATIVE OPERATIONS.

BY

FRANK BULLER, M.D.,

Professor of Ophthalmology and Otology, McGill University; Ophthalmologist to the Royal Victoria Hospital.

Reprinted from the Montreal Medical Journal, May, 1900.

FRANK BULLER, 1879.

EXCISION OF THE EYEBALL AND SOME ALTERNATIVE OPERATIONS.

BY

FRANK BULLER, M.D.,

Professor of Ophthalmology and Otology, McGill University; Ophthalmologist to the Royal Victoria Hospital.

The operation of enucleation of the eyeball versus other methods of achieving the same object, is still exciting a good deal of attention amongst ophthalmologists the world over. The report of the Committee on Excision, etc., appointed by the Ophthalmological Society of the United Kingdom, and published in the Transactions of that society in 1898, has, it would seem, by no means settled the questions at issue, and the subject will come up for special discussion at the International Medical Congress to be held in Paris next July.

That the operation of enucleation or simple excision is not unobjectionable, there can be no doubt, else we should not see these persistent efforts to find something better. True enough, the removal of a hopelessly diseased or injured eyeball may confidently be relied on to bring immediate relief from pain and minimize the dangers of a threatened sympathetic ophthalmia, or of systemic infection in cases of intraocular sarcoma, etc.; but this operation is invariably followed by more than one undesirable consequence, such as the inevitable disfigurement which results from the more or less sunken appearance of the upper lid and the restricted mobility of the artificial eye subsequently inserted. Moreover, the hollow space between the glass shell and the depressed conjunctival sac retains secretions which in turn perpetuates a state of chronic conjunctival irritation, to the annoyance and discomfort of the patient. Erosions of the conjunctiva and subsequent cicatricial changes in many instances make the wearing of an artificial eye more and more unsatisfactory and perhaps impracticable.

All these disadvantages are in a great measure obviated by the Mules' operation of evisceration with the insertion of a hollow, glass globe in the scleral cavity, which, in contrast to excision, gives an infinitely better cosmetic result, both in regard to mobility and general appearance of the artificial eye, and in the healthy condition of the conjunctival sac, which now affords no free space for the accumulation of secretions. In a word, after a successful Mules' operation, the patient wearing a well fitting artificial eye is no longer abashed by a sense of disfigurement and is no longer annoyed by a chronic conjunctivitis.

The objections raised against the Mules' operation are :—

(1) Greater liability to sympathetic ophthalmia than in cases of simple excision.

(2) Excessive reaction and prolonged convalescence.

(3) Liability to fracture of the glass globe at any time after its insertion.

(4) Liability to extrusion of the globe, especially within a few weeks of the operation.

In regard to the first objection, it is worthy of note that the Committee were only able to find five cases in which the operation had been followed by sympathetic ophthalmia. In all of these the original injury was of a sort that would in itself be likely to cause sympathetic ophthalmia. In this connection it must be remembered that there are many cases on record in which sympathetic ophthalmia has occurred within a few days or weeks after excision, and it is a well established, clinical fact that in these the disease runs a much milder course than when it has come on before excision. Now the five cases above mentioned all followed exactly this rule and all recovered with good vision ; therefore, the first objection loses much of its weight.

As for the second objection, the question of a few days discomfort or a few weeks longer in hospital, can hardly be weighed against the subsequent advantages of the Mules' procedure.

The third objection lacks data to give it more than imaginary value.

The fourth rests so much on the judgment, care and skill of the operator that a definite estimate of its value is scarcely attainable. Some operators report a large percentage of failures, others a very small percentage.

The success of all surgical operations depends so much upon attention to details and perfection of technique, that such discrepancies can only be accounted for by the unknown quantity in "personal equation." The writer has only experienced two failures in twenty-six consecutive operations, and both of these were done in the presence of recognized contra-indications, viz., one in a case of suppurative panophthalmitis, the other in a greatly shrunken globe.

Apart from these two, twenty-four successive cases, all perfectly satisfactory in their results, tell strongly in favour of the technique followed by the writer, as described in a communication read before the Ophthalmological Section of the British Medical Association in Montreal, in 1897, and which differs in some respects from the original procedure of Mr. Mules, as well as from all other known modifications of that operation.

In the minority report of the Committee made by Mr. Thomas H. Beckiston, the statement of his views on the question of excision may,

in the writer's opinion, be accepted as perfectly sound and correct. The statement is as follows :—

"In accordance with the general principles of conservative surgery and the experience of practice, *excision* is only necessary in, and its adoption should be strictly limited to :—

"(*a*) Intra-ocular malignant growths and orbital malignant growths.

"(*b*) Extensively lacerated or contused wounds of the sclerotic.

"(*c*) Shrunken globes in which the uveal tract cannot with certainty be completely removed.

"(*d*) Cases where sympathetic disease has already been excited.

"In *all* other cases *evisceration*, with or without the insertion of a "sphere, is the embodiment of the above principle, and while respecting "the moral, religious and physical scruples of the patient, amply ful- "fils the pathological requirements of each case."

It is well to remember, however, that the class (*d*) may include cases in which the exciting eye still retains some vision; under these circumstances neither excision nor evisceration would be allowable. It should also be borne in mind that even when excision has been chosen as the most suitable operation, the insertion of a glass globe into Tenon's capsule, after the method of Adam Frost, may often be practiced to the great advantage of the patient, instead of simple enucleation.