

Now comes the removal of the lens.

Here the well-trained assistant plays a very important part in controlling the eye lids and the orbital muscles. Where a well-trained assistant is not obtainable I strongly recommend the use of two assistants. One stands on the patient's left side and lifts the upper lid on the hook, with his right hand, and with his left thumb pulls down the lower lid. The upper lid should not be pulled towards the brow. It should be lifted well forward off the eye and somewhat towards the patient's feet. On no account must the lid be pulled on too severely by the hook as this will cause the patient pain. This is one of the commonest mistakes of the untrained assistant. The second assistant stands at the head of the table and pulls back the eyebrow with his first and second fingers and with the same hand keeps the head steady.

I do not propose to detail the method of expression in each type of lens. This is fully gone into in Smith's book on "Treatment of Cataract." I will simply content myself by pointing out the mistakes I have noticed and the remedy.

Firstly let me say that 75 per cent. of lenses can be expressed by means of the strabismus hook alone and the spoon is not necessary. In the case of the hard lens, *e.g.*, the immature, the pressure should not be exerted by the point of the hook alone but by the hook on the flat using the point of the hook to follow up the lens as it comes out folding the cornea underneath it. A little more pressure is exerted by the point of the hook than by the curve, but the main point to remember is not to allow the wound to gape above the lens. The lens must be carefully followed up and kept well up against the upper edge of the wound.

In the case of the large soft intumescent lens in other words the "Tumbler." This is the simplest of all cataracts to dislocate and remove by this method to those ophthalmic surgeons who have been trained by Colonel Smith or to those who have picked up his method correctly.

On account of the very thin capsule and the fluid nature of its contents this lens is very liable to rupture and the capsule be left behind if pressure is not exerted correctly. To begin with:—Place the point of the hook only on the ciliary ridge below and by means of a turning movement of the hook pull the ciliary ridge towards the patient's feet. If you are correct in your diagnosis of a "Tumbler" the lower pole of the lens will be seen to bulge forwards and upwards from below the iris. As the lens tumbles over on itself gradually "fold" the cornea behind it and don't touch the lens until you have completely folded the cornea underneath it and the lens is lying on the hollow front of the cornea. While you are "folding" the cornea beneath the lens naturally a little pressure must be exerted backwards towards the optic nerve but as a rule, this is very slight.

Now we come to one of the most important points of all, namely, replacement of the iris. The iris being very sticky adheres as a rule to the upper edge of the wound and gets caught in the angles of the wound. Firstly with the points of the iris repositor detach it from the angles and then detach it from the upper edge of the wound by passing the point of the repositor underneath the upper margin of the wound. When properly replaced the lower edge of the pupil will be seen well downwards in its proper place and the whole iris lying on the hyaloid membrane.

Tell the patient to close the eye gently and not to open it. Quickly apply the dressing to prevent the patient opening the eye.

Lieutenant-Colonel Henry Smith has recently completed a tour in the United States of America and Canada. It is evident from his experience there and the large number of cataract cases on which he was asked to operate that the American has realised the value of being able to remove an immature lens and also that he has realised the advantage of removing the lens in its capsule. The Smith operation has stood the test now of hundreds of thousands of cases in India alone and the number of cases done by this method increases every year. I think it can be confidently said that the capsulotomy operation in all its forms is dying a natural death; and being one of those ophthalmic surgeons who have operated by both methods I say "rightly so."

The reason why the capsulotomy operation has taken so long to die out is the difficulty of the Smith operation in untrained hands whereas the capsulotomy operation is easy. In England the capsulotomy will live until such time as capable ophthalmic surgeons *au fait* with the Smith operation retire from India and practise in England. What business man in England is going to wait two years until he is blind or his business is completely lost for the capsulotomy operation, when he can have his cataract removed in the capsule at once and have better vision afterwards?

THE VALUE OF THE FORMOL-GEL TEST FOR SYPHILIS.

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In the January number of the Indian Journal of Medical Research 1922, I published a paper dealing with the reliability of Gaté and Papacosta's Formol-gel test for syphilis as compared with the Wassermann reaction. The two tests were compared in a series of 539 cases. My results were given in the form of a table which I reproduce here.

	M. H. D. of complement.	No. of cases.	FORMOL-GEL REACTION.		Percent- age of agree- ment.
			No. of cases in		
			Agree- ment.	Dis- agree- ment.	
<i>Wassermann reaction -</i>					
Positive ...	{ 8 5 3	94 76 67	69 53 41	25 23 26	73.4 69.8 61.2
TOTAL ...		237	163	71	68.8
Negative ...	...	302	197	105	65.2
TOTAL ...	..	539	360	179	66.6

The percentage of agreement reached was only 66.6 and in those cases which deviated 8 m.h.d. of complement only 73.4 per cent. I came to the conclusion therefore that the test could not be considered sufficiently reliable to take the place of the Wassermann reaction.

I have since studied the clinical histories, as far as syphilis is concerned, of 120 of the above cases and the results appear to be of sufficient interest to warrant the writing of this note. Only those cases whose histories could be relied upon have been included in this series. My results are given in the form of a second table in which the cases are divided according as they gave a positive or negative reaction to the two tests.

	M. H. D. of complement.	No. of cases.	CLINICAL HIS- TORY.		Percent- age of agree- ment.
			Agree- ment.	Disagree- ment.	
<i>Wassermann reaction -</i>					
Positive ...	{ 8 5 3	28 19 14	28 19 12	.. .. 2	100.00 100.00 85.70
TOTAL	61	59	2	96.71
Negative	59	53	6	89.98
TOTAL	120	112	8	93.33
<i>Formol-gel reaction -</i>					
Positive	71	47	24	66.20
Negative	49	30	19	61.20
TOTAL	120	77	43	64.16

Those giving a positive Wassermann are again sub-divided according to the M. H. D's of complement they are capable of deviating. The clinical histories are shown separately against each test and are stated accordingly as they are in agreement or disagreement with the results

of the test. In the last column a percentage of agreement has been struck in each case.

In the case of the Wassermann reaction the total percentage of agreement is 93.33. Only two out of 59 positive reactions gave a negative history and both of these could only deviate 3 M. H. D's of complement. All the cases whose sera gave the stronger reactions also gave a positive history of the disease. The percentage of agreement in the positive cases is thus 96.7.

Six cases giving a negative Wassermann reaction had a positive history of syphilis. I will refer to these cases in more detail later.

The results with the Formol-gel test are not nearly so good. In only 64.1 per cent. of the cases does the test agree with the history of the case. The results recorded for the positive and negative reactions separately show no improvement over the total. The reliability of the test stands condemned therefore when it is compared with the history of the case as well as with the Wassermann reaction.

The details of the cases whose history disagreed with the results of the Wassermann reaction are of some interest. In the two cases which gave a weak positive reaction no sign of the disease and no history could be obtained after very thorough examination. This does not absolutely negative the possibility of a previous infection. Both of these cases were negative to the Formol-gel reaction.

The six negative cases gave the following histories :—Two suffered from parasyphilitic affections, in one the only evidence of syphilis was the presence of epitrochlear glands, a sign of doubtful value in a filarial district. The remaining three cases were definitely diagnosed as being in one of the earlier stages of the disease.

The Formol-gel test gave negative results with the two cases of parasyphilis, with the case of epitrochlear glands and with two of the remaining three cases.

One other case in the series deserves mention— a case of rat-bite fever. The serum here gave a negative Wassermann but a positive Formol-gel reaction. This finding is of interest in view of the results at present being obtained with the Formol-gel test in cases of kala-azar. It is just possible that other diseases, besides kala-azar, may also give a positive reaction with this test.



THE VALUE OF CULTURE OF THE PERIPHERAL BLOOD IN KALA-AZAR AS A DIAGNOSTIC PROCEDURE.

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THE success which has followed attempts to cultivate the Leishman Donovan body from the peripheral blood in cases of kala-azar has varied considerably in the hands of different authors