

LXXXII. *An Account of the Success of Mons.  
Daviel's Method of extracting Cataracts :  
In a Letter to James Parsons, M. D.  
F. R. S. from Andrew Cantwell, M. D.*

S I R,

Read April 1,  
1762.

**A**S my last public course of operations made in the amphitheatre of our schools, especially the lessons I pronounced there on the distempers of the eyes, procured me, since that time, frequent occasions of seeing all our famous oculists extract the cataract, and making with them several remarks on that disorder, I take the liberty to communicate them to the Royal Society, if they have not as yet come to your knowledge.

The extraction of the crystalline from the posterior chamber, by an incision made in the cornea, with a design to cure the cataract, seems to have been first attempted by Mr. Daviel. 'Tis true, Surgeon Petit, and the Oculist St. Ives, extracted it out of the anterior chamber in 1708, and the following years; but that operation was designed only to rid this chamber of an accidental burden fallen into it, in couching the cataract; and 'tis very reasonable to believe, 'twas only the examples of these two operators, led *Daviel* into this new method, which has wonderfully facilitated the cure of that disorder, and cleared up the many difficulties that appeared in it hitherto.

The Greeks and Arabians looked on the *glaucoma* as an incurable cataract; and the moderns pretended,

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that

that the incurability proceeded from the nature of some other distemper complicated with the cataract. 'Twas hard to tell why, the cataract once couched, the patient should remain blind, or why it should rise again into its place.

This new operation shews us, that not only the crystalline, but even sometimes its capsula, and sometimes only the anterior membrane of this bag, are opaque, sometimes adherent to, sometimes separated from, the body of the crystalline.

Sometimes the anterior membrane of this bag has been found opaque, and the crystalline transparent, and, in all these cases, the patients have recovered their sight.

Dr. Fallon, bearer of this letter, has assisted with me at a very difficult operation of the cataract, and is to present you a small box, in which are three packets.

N<sup>o</sup> 1. Contains a portion of the anterior membrane of the *Capsula crystallini*. This humour, being still transparent, was left untouched. The patient saw perfectly well after the operation.

N<sup>o</sup> 2. Contains an opaque crystalline, and a portion of the anterior side of its bag, quite opaque. The patient recovered his sight.

N<sup>o</sup> 3. Contains the whole bag and crystallini, extracted the 14th of this month. 'Twas adherent to the posterior, and superior, side of the iris; and was quite whole and plump, when drawn out.

It this last case, it commonly happens, that some portion of the vitreous humour follows; sometimes it mixes with the aqueous, and comes off with it; sometimes the eye appears quite sunk; and sometimes the

vitreous

vitreous humour filling, as it were, the posterior chamber, makes the *iris* bulge forwards, and appear prominent upon it, the whole together resembles a kind of *hernia*. These two last cases require a nice and prudent hand: the prominent vitreous humour is to be cut off, in two or three days after the operation, the eye then banded, but not compressed, and the patient laid in his bed, the head lower than usual, till the rest of the vitreous humour gets back into its cells, and remains there. This we have seen examples of; the vitreous humour regenerates, and, though a great portion of it be lost, 'tis supplied again, sooner or later, and the patient recovers his sight.

I saw Daviel extract the crystalline quite opaque, with its whole bag adherent to it; and this bag I dissected from it, after the operation was over.

In the operation of the 14th instant, the crystalline, and its whole bag, made one entire spheroid, soft and plump; but 'tis already broke, and dry.

Blue eyes are the most subject to the cataract, and black ones to the amaurosis. In these, the ciliary nerves and fibres are always weak; in those, strong and elastic.

1. A crystalline couched, if the capsula be opaque, leaves the patient blind.

2. A crystalline couched in appearance, if it adheres, in any point, to its capsula, must rise again.

3. If the posterior side of the bag be opaque, and remains, the patient must remain blind, whether the crystalline be couched or extracted.

4. If the posterior side of the bag is adherent to the crystalline, it must be extracted; and then, there is great danger of the vitreous humour coming off.

5. The mistakes of *Sennertus*, *Riverius*, *Heister*, *Antoine*, *Maitre Jean*, *Brisseau*, and *St. Ives*, &c. about the glaucoma, are easily answered for, in this new theory, founded on facts and daily experience.

If this short account of what I have been an eye-witness to, be any way acceptable to the Royal Society, I shall soon send you some new remarks on the amourosis and fistula lachrymalis.

I am,

S I R,

Your most humble

and obedient servant,

March 17, 1761.

Andrew Cantwell,  
Professor of Pharmacy and Chymistry at the Schools of Medicine of Paris.