

II. *Observations upon Incisions of the Cornea.* By
Monsieur Gandolphe, Doctor of Physick at
Dunkirk. April 1709.

CONTusions upon the Bodies of Animals do not always make the greatest Impression on the Parts that immediately receive them: I had an Instance of this, in a blow upon the Eye, this present Month of *April, 1709.*

There was a light Contusion on the outside of the Part, with very little alteration to appearance; but a Vessel being broken within, pour'd forth a considerable quantity of Blood: The Eye also lost its Transparency, and almost its Sight; which was so very weak, that it could scarce perceive the greatest Light when objected to it. The *Cornea* appear'd all over red, but without any Inflammation or Blood-Vessels; it receiving its colour from the Blood pour'd in upon the *Aqueous Humour.*

I saw the Patient the 6th day after he had received the Hurt: He had been let Blood thrice; and the 8th day I caused the *Cornea* to be open'd near the middle; my design being to make a large Orifice, I determin'd not to make it at the bottom of the *Cornea.* The Orifice being made, there came forth some drops of the *Aqueous Humour* mixt with Blood. The *Cornea* still appear'd as red as before, and was not so even as we could have wish'd. This Circumstance made me resolve to make a second Orifice immediately, as large as the former, but lower: There run out some drops of the *Humour*; and the Eye appear'd not so red and convex as before. The

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Humour continued coming out of the Orifice for some time. We applied nothing to the Eye, but a Compress (or Stupe) dipt in a Mixture of four Ounces of Plantain-water, and two Ounces of a Vulnerary Water.

The day after the Operation, the upper part of the *Cornea* was transparent, the lower part not so red, and the whole Membrane appear'd to have recover'd its natural Convexity. It seems that all the extravasated Blood had quite run out, had the lower part of the *Cornea* been open'd, and remain'd so for some time.

I observed the Alterations of the Eye for three days together; in which time the extravasated Blood seem'd some times to spread over the whole Cavity of the *Cornea*.

We judg'd that the motion, that the Patient himself, had opened anew some Blood-veffel, or had mix'd the extravasated Blood with the *Aqueous Humour*; for we did not perceive all that time that there was any fresh Effusion of more Blood.

The 5th day after the two first Incisions I caus'd a third to be made at the bottom of the *Cornea*: there run out some drops of the *Humour*, and continued so to do for some time; and in two days after, the Eye recover'd its natural Transparency.

The *Pupil* was now very much dilated; but by little and little it contracted again, but not to its usual smallness.

The *Iris* all this while kept its motion; so that we cannot suspect that the Lancette, in making the Incision on the *Cornea*, any ways touch'd upon the *Iris*, because the *Pupil* continued exactly round: And a stroke, that is able to divide the continuity of the Parts of the Eye, and cause a suffusion of Blood, is but too capable of depriving the *Iris* of its natural Power of Contracting.

The *Pupil*, which before the Blow was one Line in Diameter when the *Iris* was contracted, is at least two Lines in Diameter at present. The transparency of the *Humours*, and Convexity of the *Cornea* are the same as before.

The Sight is now restored ; and there remains no other alteration than what necessarily follows from the like Dilatation of the *Pupil*.

From hence we may draw some Remarks, that will be of use in Practice, and shew that Incisions may be successfully made on the *Cornea*.

1. Incisions are made on this Part without any Pain.
2. The Orifices unite again without any Scar ; which has been before observed, but is known to very few.
3. We find that Plants of a discussive Quality have an ill effect, the Patient finding himself much worse after using a Cataplasme made of Cervile and Parsley : These Plants, which are excellent in resolving Extravasated Blood in the Muscular Parts, have an ill effect when applied the to Eye, by causing Pain, and rendring the Sight more disturbed. We had twice experieuce of this ; and the Patient assured us both times, that he found himself much better from the use of the first Medicine.

When there is a considerable Effusion of Blood in the Eye in couching of a Cataract, and no Orifice is made in the *Cornea* to let it out, it may so alter the Transparency of the *Vitreous Humour*, as to cause a loss of Sight ; which sometimes follows from this Operation.

Additions.

I made the Incision higher on the *Cornea*, than it ought to be, because the Person that perform'd the Operation, having never before made the like, and desiring to make an Orifice large enough to discharge easily the *Aqueous Humour*, I thought it proper to make it near the middle

middle of the *Cornea*, that the Point of the Lancette might not touch upon the *Iris*; which would have been of much worse consequence than a Scar. The Effusion of Blood, that sometimes happens in Couching of Cataracts, is discussed again either by external Applications or the Help of Nature; but when the Effusion is very considerable, this Operation may be necessary to prevent worse Consequences.

As for the Scar, that sometimes follows from an Incision of the *Cornea*, I remember I have read in an ancient Physical Author, that we need not fear it: But if we Practice Incisions on Eyes affected with Inflammations, Ulcers, or Defluxions, which very much dilate the *Retina* and Vessels, an Eschar forms itself much more easily in these Cases, and consequently we ought to use the greater caution; which was not so necessary in my Patient, who had no kind of Inflammation on the Eye or *Cornea*.
