- I. *An Account of some uncommon Anastomoses of the Spermatic Vessels in a Woman, observed by Cromwell Mortimer, M. D. R. S. Secr. & Coll. Med. Lond. Soc.*

EUSTACHIUS, that most accurate Anatomist, is the only Author I have met with, who has given us any Delineation of an immediate Communication between the Spermatic Arteries and Veins; during their Course along the Cavity of the *Abdomen*; which is distinctly laid down in his anatomical Tables (*Romæ in Folio 1714.*) *Tab. XII. Fig. 1 & 3. Tab. XIII. Tab. XXV.* Boerhaave from him makes mention of these *Anastomoses* in his *Institut. Med.* § 642; and also cites *Leal Lealis* in his Treatise *Περί Σπερματιζοντων Οργανων* (*Lugd. Bat. 8vo. 1707*) *p. 18 ad 26*; where he fully refutes *de Graaf*, who denies these *Anastomoses*: but even *Leal* owns, he never saw them, and only argues for them from the Effect, and the close Union of the Spermatic Vein and Artery in one Covering as they run together. *Marchetti* in his *Anatomy* (*Hardevica 12^o. 1656.*) *Chap. of the Parts of Generation in a Man*, asserts this *Anastomosis*, *p. 58*, but neither do I find that he ever saw them; nor have I hitherto conversed with any, even Anatomists, the most celebrated for their Injections, who had hit on a Subject, where these Passages were open enough to transmit the subtile Matter they inject with.

In the Beginning of the Year 1723, being at *Paris*, and at the *Hotel Dieu* having an Opportunity of dis-

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fecting various Bodies, I light on a female Subject where these *Anastomoses* were as large as the spermatic Vessels themselves; so that the Arteries being injected with a gross Mixture of Wax, Tallow and Vermilion, and the Veins with the same, only tinged with Smalt, the Injection ran out of the Artery into the Vein, and on the other Hand out of the Vein into the Artery, so that where one Vessel entered the other, the Matter injected was tinged purple. You must observe the Arteries were first injected with the red, and the Veins afterwards with the blue Matter.

In this Subject what appeared most remarkable, was, that on the right Side were two spermatic Arteries A and B. One A, arose from the very Angle made by the Emulgent and the Trunk of the *Aorta descendens* C, which, contrary to the common Course, ran under the *Vena Cava*, and soon after it was got beyond it, sent out a lateral Branch, or *Anastomosis*, descending obliquely EF into the Spermatic Vein G, through which the red Matter penetrated into the Vein; which being afterwards filled with Blue, became Purple all about the Orifice of this Vessel at F, which seems to confirm *Eustachius's* Delineations, and shew they are no Fictions. This Artery A then descended as usual to the right Ovary H.

The other right Spermatic Artery B arose as usual out of the Trunk of the *Aorta*; but at about half an Inch from its Rise, it sent out an *Anastomosis* IK, ascending obliquely into the Body of the *Vena Cava* D, through which a large Quantity of the red Matter passed, so as to tinge a very broad Place at K in the *Vena Cava* purple. About an Inch below this Orifice

was

was another *Anastomosis* L M, through which the blue Matter penetrated out of the Vein, and made the Contents of the Artery purple at L. The right Spermatic Vein had only this one *Anastomosis* M L, in all other Respects as usual. Here was something surprizing to see the Course of the Channel inverted, if the Blood ran from the Vein M towards L, into the Artery; but surely this must be from some Accident in the Injection, for it could never be so in the Person's Life; only indeed the oblique Rise of this Branch out of the Vein seems to shew, that the Blood ascending in the Vein would have its natural Direction into the Orifice of that Channel, or at least the Blood coming from the Artery would meet with a Stop, and so the two Streams retard each other.

On the left Side was but one Spermatic Artery N, and one Spermatic Vein O, which, as usual, inclosed in a common *Involucrum*, made their Way to the left Ovary P. Only the Artery N took its Rise out of the Body of the Aorta near the Angle made by it, and the left emulgent Artery, then ascending between the emulgent Vein and Artery, turned in an Arch at Q, over the left emulgent Vein, and so joined the left Spermatic Vein as usual, which rose out of the left emulgent Vein, as it often happens.

There was on this Side one Thing very uncommon, and not taken Notice of by *Eustachius* himself, which was a short *Anastomosis* R S (about a quarter of an Inch in Length) from the left emulgent Artery S, which making an Arch under the left emulgent Vein, was inserted into the anterior Part of it at R.

The small Branch arising out of the Aorta on the right Side at T, an Inch above the Emulgent, and its being inserted into the upper Part of the Kidney, is what we have many Varieties of in *Eustachius's* Tables to his Book *De Structura Renum* (8vo. *Leid.* 1707) almost an Infinity of such Variations, and likewise of small Branches inserted into the emulgent Veins, as at V, are daily met with, and have been observed by many Authors.

Explanation of Tab. I. Fig. I.

- A B, Two Spermatic Arteries on the right Side.
 C C C, The *Aorta* descending, and the two Iliac Arteries.
 D D D, The *Vena Cava* ascending, and the two Iliac Veins.
 E F, L M, *Anastomoses* of the Spermatic Veins and Arteries.
 G G, The right Spermatic Vein.
 H, The right Ovary.
 I K, An *Anastomosis* of the Spermatic Artery and *Vena Cava*.
 N Q N, the left Spermatic Artery.
 O O, The left Spermatic Vein.
 P, The left Ovary.
 R, S, An *Anastomosis* of the emulgent Vein and Artery.
 T T, } Arteries and Veins dispersed on the Fat and
 V, V, V, } Membranes enclosing the Kidneys.

Tab. I.

Fig. 2

Tab. I.

Fig. 1.

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Fig. 3

Fig. 2