

III. *An Account of a præternatural Tumour on the Loins of an Infant, attended with a Cloven Spine. By Dr. Rutty, Fellow of the College of Physicians, and of the Royal Society.*

THE curious Mr. *Ruyfch*, in an Observation on the *Spina Bifida*, takes notice that other Writers have describ'd it to be cloven into two equal parts longitudinally, as Butchers split the Back-bone of an Ox or Sheep; whereas out of ten Subjects, which he had an opportunity to examine, not one prov'd to be in that manner, the Body of the *Vertebræ* being entire, and the *Acute Processes* only divided. Pretty near this Description, is the *Spine* to be treated of, and I the rather trouble this Society with it, because it don't appear by the Transactions, that it has as yet come before us.

The Back-bone is of a female Infant six Days old; whose Mother, when seven Weeks gone with Child, upon a fright occasion'd by her Husband's falling from a Horse and very much bruising his Loins, gave the *Embryo* this injury; but notwithstanding she went out her Time, and the Child was full grown.

There appeared upon the region of the Loins, in the same place where the Father receiv'd his hurt, a Tumour about the bigness of a small Turnep, with a broad *Basis*, around which the Skin was discolour'd, as by an *Ecchymosis*, but it grew immediately from thence pellucid, like a Vesicle rais'd by *Cantharides*, and continued so throughout, except just at its *Apex*, where was a Substance like a *Fungus*. This Bladder was fill'd with

with a Liquor, which in Scent and Colour resembled the true Urine: insomuch, that upon strictly examining the Linnen stain'd by what issu'd from hence, with that from the *Pudenda*, we cou'd perceive no sensible difference, and concluded there was a Communication between the left Kidney and the Orifice, into which the Surgeon's Probe pass'd obliquely upwards, about an Inch. Of the same opinion was Dr. *Pellet*, then present. Whether the same Similitude may hold, betwixt the Urine and this Liquor, in all Cases of the like Nature, I have not had opportunities to observe: but as Mr. *Ruyfch* has taken no notice of it, in such a Number of Subjects, that have been before him, I am apt to think, that it does not; being easily perswaded, that if it did, it would not so often have escap'd his inquisitive Researches. I cou'd have wish'd however, that this Fluid had been sav'd; to have try'd by Experiments, in what other Qualities, besides the Scent and Colour, it might correspond with the Urine; which wou'd have given us a farther Insight into the Cause of this Affinity between them, in the particular instance now before us.

Upon opening the Body, where were present Dr. *Pellet*, and Mr. *Stephens* an ingenious Surgeon, the Kidneys, contrary to Expectation, were *perfect*, and did not any way communicate with the outward Orifice.

But upon clearing away the Fungous Substance, which took up all the *Sulcus* or Hollow of the *Spine*, we found where the Perforation tended; a long Probe easily passing up the Channel, which contains the *Medulla Spinalis*. Throughout this *Fungus* were dispers'd a great many endings of small Nerves, from whence distill'd this, as it were, Urinous Liquor, which occasion'd the Tumour: the rest of the *Medulla* was more compact, and fill'd the Cavity of the *Spine*; tho' in some Subjects it has been wasted to such a Degree, that by blowing

into the Orifice you may inflate the *Dura Mater*; as was done by Mr. *Dobyns* a Surgeon, in a Case of this Nature. The Coat of the Tumour consisted at its *Basis* of the *Cuticula*, *Cutis*, and *Membrana Adiposa*: the two first of which forthwith terminating, the *Cuticula* on'y was continued; immediately under which appear'd the *Muscles* and *Fungus* above mention'd. In this it differs from those of Mr. *Ruyfch*, which received their Coats from the *Membranes* that cover the *Medulla*: as likewise from those taken notice of by *Tulpius*, which borrow'd theirs from the *Peritonæum*, as he says; tho' by his own Description, it is more likely they proceeded from the same *Membranes*.

These Tumours constantly attend the *Spina Bifida*: insomuch, that when any of them present themselves on the Loins or Back of a new-born Infant, we have good grounds to pronounce *This* to be the Cause; but we may be positive in it, if the Child can't move its lower Limbs; the want of which motion is an infallible Indication, that the *Medulla Spinalis* reaches no farther than the Swelling, whereby the Nerves are not distributed to those Parts. They appear differently in different Subjects. In some the whole Tumour is *Opake*; which proceeds from small Filaments of Nerves propagated in great numbers throughout its Coat, and not from the thickness of the Skin, as *Ruyfch* will have it. In others it is *pellucid*; and then the *Medulla* terminates at once at the Aperture of the *Spine*, and does not shoot out into any Ramifications. This before us is a Composite of both Species, the greater part of which was *pellucid*; the less, *viz.* the *Apex*, *opake*.

The Back-bone itself, you may observe, is not cleft, but has its *Vertebrae*, with their *other Processes* entire, and is only defective in its *Spines* or *Acute ones*. But that

that Portion of the *Vertebra*, which should make an acute Angle, from whence their *Spinal Processes* naturally arise, in order to form the *Specus* or Passage for the Marrow, instead of that, gapes and lies almost in a strait Line on each side; whereby the *Medulla* is defrauded of its usual Guard from external Injuries. This Defect begins at the third *Vertebra* of the Loins, and is continued to the end of the *Os Sacrum*: which last is very extraordinary, it scarcely ever happening to this Bone; the reason of which I take to be the more than ordinary Compactness of its *Vertebra*, whereby it is less liable to be injur'd by any Impression. For we observe, that in Adults they grow so close together, as to unite and form one large and solid Bone.

As the Case before us is a *Vitium Conformationis* owing to the Mother's Imagination, so the Same sometimes is occasion'd by Matter lodging upon the *Spine*, and eroding the *Vertebra* by its Acrimony: but then you find a *carious Bone*, whereas in these *præternatural* Cases, there remain no such Footsteps. This was observ'd in the Body of the late Lord *Peterborough*, as related by Mr. *Comper*: Upon the opening of which, He found a large Tumour, from whence flow'd a brownish colour'd Matter; and under it, the upper and fore part of the ninth, and the lower part of the eighth *Vertebra* of the *Thorax* were consumed and gone, the *Medulla Spinalis* being cover'd with its *Membranes only*. This gave rise to those Symptoms in that *morbid* Case, so nearly resembling the above recited in this *præternatural* One.

It is manifest from what has been said, that these Cases are incurable, and must in a little time kill the Patient. But it is almost immediate Death to open the Tumour; which every Surgeon will naturally do, that has not seen or read concerning it: the Fluid seeming

so require a Discharge. It is for the sake of those Gentlemen that I have taken upon me to describe it, who possibly may not have the above-mention'd Authors in their Hands; the only Ones that have observ'd it with any tolerable Accuracy.

IV. *An Account of Two Observations in Gardening, upon the change of Colour in Grapes and Jessamine. In a Letter from Mr. Henry Cane.*

Hillingdon near Uxbridge,
Oct. 31. 1720.

B EING a little curious in the Collection of all my sorts of Fruits, amongst other sorts, I have three or four of white Muscadine Grapes, very distinguishable by their Tastes, one of which pleased me above the rest; a Cutting of which about six Years since I planted against a Wall, on an Eastern Aspect, where it has the Sun from its rise till half an hour after Twelve. The Soil is a stiff Clay, but to make it work the better, I meliorated that, by mixing some Rubbish of the Foundation of an old Brickwall, where it now grows. In *January* last was twelve Month I pruned it, and the Figure was thus,

Left Hand T Right Hand *Black*

At time of Year it shot at both Hands about twenty two inches of a side, before it came to a Joint; that on the Right was a very luxurious exuberant Branch, as big as the body of the Tree, the other side not half so thick or big, and the Leaves on the right were as big again as the other