

III. *An Observation of an Infant, where the Brain was depressed into the hollow of the Vertebrae of the Neck: By Dr. Edward Tyson, Fellow of the College of Physicians, and R. S.*

A Bout Years ago I was desired with Mr. *Layfield* a Chyrurgeon to see a Birth in the Neighbourhood, which was reported to be very Monstrous and Surprising: When I came I found it far different from the Report Good Women first gave of it; But what I thought very extraordinary, and much like the Instance lately given in the Philosophical Transactions, N^o 226, for the Month of *March*, 1697. In my Description of it, I can't be circumstantial in all particulars as I would, not having the Notes by me I then took, they being at present misplaced; and indeed I had not an opportunity of fully satisfying my self, the Child being to be Buried presently. Yet what I chiefly design to remark, was so obvious that I can't mistake in the account of it.

As first the Midwife informed me, that she was very sensible that the Child was alive, and that it died in the Birth, or a little before. When I observed it, I found it well grown; all the Limbs and Body well Proportioned and Plump; the Face well featured, only from the Eye-brows; the Scull was perfectly depressed down to the *Osses Sphenoides*, or *Basis* of the *Calvaria*; so that it had no Forehead at all.

I opened the *Cranium* in several places, before I could find any Brain at all; the *Cranium* being every where so depressed and touching the *Calvaria*; but at length

II

I observed near the passing out of the *Medulla Oblongata*, to the *Medulla Spinalis*, a small quantity of the Brain; the whole might be included in a Walnut-shell. 'Twas covered over with a bloody Matter: At present I do not well remember whether I did distinguish the *Cinereous* and *Medullary* Substances here; but thrusting down my little Finger thro' the *Foramen* where the *Medulla Spinalis* passes; I observed a very large Cavity in the hollow of the *Vertebræ* of the Neck, so that I could turn my Finger round a good compass there; which easily made me to conclude, that the Brain must be pressed down hither; which I was the more induced to believe, because the Mother informed me, that when she was with Child, she received a considerable bruise in her Belly; I had no opportunity of making more particular Remarks, because, as I said, the Child was to be presently Buried, and what we did was in the same Room where the other was; otherwise I should have endeavoured to have traced the Nerves, and by opening the *Vertebræ* of the Neck to observe what distinctions of parts of the Brain I could have discovered there. For this large Cavity of the *Vertebræ*, I found to be filled with a Substance like the Brain or *Medulla Spinalis*, or both. But far larger than the *Medulla Spinalis* its self could be in so small an Infant.

And how far the *Medulla Spinalis* may answer the Office of the Brain especially in the Embrio's, where there is no Exercise of the Senses, nor the Imaginative Faculty, will be no great difficulty to apprehend; since for the Functions of Life in them, the Spirits generated even in the *Medulla Spinalis* (for it has a Glandulous Substance too, but inwards) may suffice. Especially in this Instance where I do suppose a great part of the Brain to be detrued (by the bruise the Mother

ther received) into the hollow of the *Vertebræ*: and do Quære, whether in those Instances that are given of Births of Infants without Brains, there might not be the like Accident of the Brain, or the Principal Parts of it being depressed into the *Vertebræ*; which in Embrio's, (before hardened into Bones) are Parts extendible. But the Brain being confined in so narrow an enclosure, it stunts its growth and enlargement; yet may be sufficient to supply Spirits for the maintaining those Offices of Life the *Fætus* enjoys, before the Birth whilst in the Womb.

But somewhat to confirm these Instances given in the same Transaction, of Life continuing after the loss of a great part of the Brain, I shall add this following Observation.

IV. *An Observation of one Hemisphere of the Brain sphacelated, and of a Stone found in the substance of the Brain its self: By Edward Tyson, Fellow of the College of Physicians and R. S.*

Decemb. 12, 1688. I was desired to be present at the opening of Mr. A. About Two Months before (as I was informed) he had received in a Quarrel at the Tavern a great bruise on his Head by a Quart Pot. But for the present neglected the use of means, till at last he was forced to betake himself to his Bed. Dr. *Morton* was sent for. He found him to complain of a most violent pain in his Head. He sometimes Vomited,