Since that epoch, many philosophers have published analogous researches regarding the intimate texture of animals; but avoiding the fault for which I have censured the older observers, I will compare their observations with mine, before relating my later investigations. In a memoir on the phenomena which accompany the contraction of muscular fibre, read before the Institut, in August, 1823, MM. Prevost and Dumot return to the intimate texture of muscles, and confirm the results which I have related above. It is the same with respect to the observations which these physiologists have made on the nervous fibres; on this point, as on the subject of the tissue of muscles, the investigations of these philosophers are entirely in accordance with what I have advanced from the result of similar observations.

M. Dutrochet, in a work rich in numerous important physiological facts, has also treated of the intimate textures of animals, and confirmed the opinion which I have emitted, with regard to the globular structure of the tissues which enter into the composition of these beings. He has verified the accuracy of my observations, in having found, in all the organs of animals, globular corpuscles, sometimes united into linear and longitudinal series, sometimes agglomerated in a confused manner. It is under this last respect, he says, that these globular corpuscles are present in the secretory organs, as the liver, kidneys, salivary glands, and testicles. The spleen and ovaries do not present a different tissue, and this fundamental similitude of the texture of all the parenchymatous organs is such, that in the frog it is almost impossible to distinguish one from another. When under the microscope, the tissues of the brain, the liver, the kidneys, or the spleen, we perceive nothing but globular bodies, agglomerated in a confused manner, and constituting by their assemblage the tissue of the organ.*

From the passage which I have just quoted, it will be seen that the observations of M. Dutrochet completely coincide with my own. He was equally struck with myself by the great uniformity which is to be found in the intimate texture of the most different part of animals, and he recognised throughout the globular forms which may be called the organic element of these tissues. The labours of this physiologist fully confirm the only point which I wish to establish at this moment, that the elementary globules form in nerves, fibres united into bundles or cylinders, the interior of which is hollow.—(*To be concluded in our next.*)

* Recherches Anatomiques et Physiologiques sur la structure intime des Animaux et des Vegetaux, et sur leur Myotite, p. 201.

WARDROP ON NÆVUS MATERNUS.

To the Editor of THE LANCET.

SIR,—As the following case illustrates a mode of treatment which I am not aware has yet been successfully employed for the cure of *nævus*, may I beg you will do me the favour to insert it in *THE LANCET*, a Journal from which both science and humanity have, in my opinion, derived essential benefit.

I am, Sir,

Your obedient servant,

JAMES WARDROP.

Charles-street, St. James's-square,

May 26, 1827.

Case of Nævus on the Face successfully treated, by tying the Carotid Artery. By JAMES WARDROP, Esq. Surgeon to the King.

Is a paper on the structure and treatment of that species of tumour called *nævus maternus*, which was published some years ago in the Transactions of the Medico-Chirurgical Society, I gave an account of a large tumour of that description on the face of a child, wherein I attempted to cure the disease, by tying the carotid artery; and though, in that instance, the operation was unsuccessful, still its effects were such as to impress on my mind the great probability of success in similar cases, if the operation were resorted to under more favourable circumstances; I have now to narrate an example of a *Nævus* on the face, which has been successfully treated by tying the trunk of that vessel.

Before, however, stating the particulars of this case, I may observe, that the structure of such swellings made it appear a plausible method of treatment, and that such a mode of cure might have been calculated upon, consistently with well-established pathological doctrines.

I had demonstrated by dissections, in the paper already alluded to, that the Subcutaneous *Nævus*, properly so called, is a tumour composed of a congeries of cells, which are either the continuations of, or have a direct communication with veins, so that venous blood circulates through the cells, in like manner as in the anastomosing aneurism described by the ingenious Mr. John Bell, the cells of which are filled with arterial blood.

Now it having been unquestionably ascertained that tying the arterial trunk, which supplies an anastomosing aneurism, cures that disease, it seemed to me rational to conceive, that if the current of blood through a *nævus* were arrested by tying the arterial trunk supplying it, the blood contained in the cells, or what may be considered as the parenchyma of the tumour, would be put at rest, and undergo a process of coagulation,

similar to blood in a common aneurismal sac after the artery has been tied; and likewise, that the coagulated blood would be afterwards absorbed, and that the parenchyma of the tumour would gradually shrink. In the hæmorrhoidal swelling, the structure of which much resembles that of the nævus, a process very similar to that now described often takes place; the blood contained in the dilated veins, and in the cellular structure, of which the tumour is composed, from some cause no longer circulates, becomes coagulated, and is absorbed; the swelling afterwards shrinks and hardens, and leaves the cellular structure of the tumour in the state of a more or less solid and inert mass.

CASE.—A female child, five months old, with every appearance of good health, had a large subcutaneous nævus on the left side of the face, covering one half of the root of the nose, the eyebrow, and the upper eyelid, which could not be sufficiently opened to expose the eyeball, nor could the precise limits of the disease be traced in the orbit, within which it seemed to penetrate deeply. The tumour was of a pale blue colour, and there were numerous tortuous veins in the integuments covering it. It had no pulsation, felt doughy and inelastic, and when squeezed, it could be greatly diminished; on removal of the pressure, its original size was rapidly restored, but it had no pulsation.

As it would have been extremely dangerous, and probably even impracticable, to have removed this tumour with the knife, and as it had been rapidly increasing since a few days after the birth of the child, I agreed with Mr. Gibbon of Kettering, under whose care the child was, that the only chance of arresting the fatal progress of the disease, was by tying the trunk of the common carotid artery of that side on which the tumour was situated; which operation was accordingly performed.

Operation.—The incision of the integuments was made about the middle of the neck, on the tracheal edge of the sternocleido-mastoideus muscle, and the rest of the dissection was chiefly accomplished with a sharp-pointed double-edge silver knife.

The operation was more difficult than might have been expected in a simple dissection amongst healthy parts, and this arose from the unceasing crying of the infant, which kept the laryngeal cartilages and trachea in constant motion upwards and downwards; which not only prevented the pulsation of the carotid being distinguished, so as to assist in guiding me during the different stages of the dissection, but when the sheath of the vessel was distinctly penetrated by the point of the knife, the perpetual motion of the trachea and surrounding parts rendered it difficult to get

the point of Bremner's aneurismal needle conducted by the finger fairly within the sheath. When, however, this last step of the operation was accomplished, the needle passed around the artery with great facility.

I may here remark, that in the operation of applying a ligature to an artery, perhaps the most important step to which the surgeon ought to direct his attention, is completely to denude the coats of the artery, before attempting to pass the needle underneath the vessel. If the artery be dissected quite bare, it is astonishing with what facility the blunt point of an aneurism needle can be carried round it, whereas, if such a dissection be not made, the passage of the needle becomes both tedious and difficult, the point meeting with a strong and firm cellular tissue, to tear during every stage of its progress around the vessel. Indeed it may generally be remarked, that it is a want of due attention to this part of the operation, which is the cause of the difficulties and delay usually experienced in performing it. A fear of wounding the vessel generally leads to this error, the operator not dissecting completely down to the proper coats of the artery, whilst, if this be accurately done, the cellular membrane immediately surrounding the coats of the artery is so loose, that the point of a blunt instrument, or the finger, can be readily thrust behind it. In thus denuding an artery, little fear need be apprehended of puncturing its coats with the silver knife, which is a well-adapted instrument for the dissection. The rounded form of the vessel, its elasticity, and its mobility in the sheath, rendering such a wound very difficult and very unlikely to happen.

Some divided vessels bled a good deal during the operation, so that the wound was kept filled with blood, and the dissection was necessarily conducted with the finger as the only guide.

The ligature being tied round the artery, the edges of the wound were brought together by a single stitch, and no adhesive plaster and bandaging were employed. The infant appeared much exhausted and pale after the operation, and we administered a teaspoonful of the syrup of white poppies.

A remarkable change was immediately observed in the tumour. No sooner had the carotid been tied than the child was observed to open the upper eyelid sufficiently to expose the eyeball, which, until that period, had never been in view from the bulky swelling of the palpebra. The colour of the tumour was also changed, losing its scarlet hue and appearing of a much darker blue shade, a change which evidently had arisen from the collapse of the arteries, whilst the veins and cells of the tumour remained filled with venous blood.

Soon after the operation the child became tranquil, and in a few hours was permitted to suck the mother, which she afterwards continued to do as usual. Before, however, allowing her to suck, care was taken to tranquilize the mother's mind, by having her absent from the house during the operation, and concealing from her the extent of the wound when she again saw her infant. I am not aware that surgeons are generally impressed with the importance of attention to this circumstance when performing operations on children. If the mind of a nurse is agitated, it is well known that such excitement has more or less influence on her milk, the effects of which milk is more or less hurtful to the child. Some writers on the diseases of children have stated cases to illustrate this fact; and I have met with some striking examples of it, which have led me to suspect that the supposed dangers of operating on infants have originated, not from the irritation of the operation itself, but from the mind of the nurse being agitated on such an occasion, by changing the quality of the milk, disturbed the health of the child. I once removed a hard, irregular-shaped tumour from behind the angle of the jaw of a child which was suckled by its mother, and no febrile symptoms supervened; the wound suppurated kindly and cicatrization was going on, when one night the mother was thrown into a furious passion, immediately after which she suckled the infant. Very soon afterwards the child was seized with convulsions, and died in a few hours. Since I met with the above case, I have had opportunities of seeing repeated instances of the pernicious, though not of the fatal, effects on the child of mental agitation in a nurse; and these have led me to adopt, as a general rule, never to allow an infant to suckle a nurse after an operation, until it has been ascertained that the nurse's mind has not been much agitated; and if it has been so, then to empty the breast by an artificial sucker until she has become tranquilized.

The child passed a very quiet night after the operation, and what seemed a remarkable circumstance was, the very slight degree of excitement which it seemed to create in the general system. The infant continued to suckle as if nothing had been done, and its bowels kept so regular that not even a purgative was afterwards administered. The wound inflamed but in a very slight degree, and required no dressing. The weather being mild, the child was carried out in the open air on the fourth day after the operation, and daily afterwards. The ligature came away spontaneously on the eleventh day, and on the thirteenth day after the operation she had so perfectly recovered, that the parents, anxious to return home,

travelled to Kettering, a distance of upwards of seventy miles, without the child suffering any inconvenience.

With regard to the changes in the tumour after the operation, I have already noticed the sudden collapse which took place immediately after the carotid artery was tied. On the day following it continued of the same diminished bulk, and of the same dark purple colour, and on feeling it, it seemed either as if the blood which it contained had coagulated, or that it was emptied of its blood; for instead of being able to squeeze out its contents, the application of pressure made no sensible alteration in its bulk.

No particular circumstances occurred after the child's return home, except a gradual, though not always progressive, diminution in the bulk of the tumour. By degrees more and more of the eyeball became exposed from the lessening of the swelling of the upper eyelid, and then it appeared that the lachrymal caruncle was involved in the disease and was preternaturally swelled and vascular; and last January (ten months after the operation) Mr. Gibbon wrote—"I have to give you the pleasing intelligence, that the amendment in our little patient has been rapid since my last report, and *nothing of the tumour now remains*, more than that of the membranous bag, which was originally distended with blood."

Charles-street, St. James's-square,
May 1827.

ABUSES AT ST. GEORGE'S.

A Letter to the Independent Governors of St. George's Hospital, proving a Loss to the Poor, by mismanagement, of (even in Eight Items,) NINETY THOUSAND POUNDS! By W. W. SLEIGH, Esq., one of the Governors of that Charity.

My Lords, Ladies, and Gentlemen,—The only apology I shall offer for thus addressing you is one which, I believe, will be considered satisfactory, viz. that I am vindicating the cause of *thousands of our unfortunate fellow-creatures*. Regardless, therefore, of the motives that may be attributed to me, I shall, I trust, as a Governor of St. George's Hospital, conscientiously discharge my duty: and by adducing a few facts only, call forth the exertions of some, whom God has blessed with power to protect the helpless. Previous to my commencing, I would take the liberty of replying to two questions that, in all probability, will be put to me. First, "Why I have delayed so long without calling the attention of the Governors to these circumstances?" and, secondly, "Had I been successful at the late election, would I ever have noticed them?" To the first question,