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"The Portio Dura or Facial Nerve"

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Portio Dura or Facial Nerve

The class of Nerves to which the above belongs, comes off from the Base of the Brain. There are nine pairs, and are divided into Nerves of Special Sensation, of Common Sensation, and of Motion. A Nerve is an organ of Sensation or Motion. In our treatise upon this Nerve, we wish to notice its Anatomy, Physiology and Pathology. To begin its Anatomy, we notice it arising from that portion of the Brain, known as the Medulla Oblongata, in the groove between the Corpora Olivare & Corpora Restiforme. It passes forwards along the Crus Cerebelli, and comes in relation with the Auditory Nerve, with which it enters the Meatus Auditorius internus, lying first to the inner side and then upon that Nerve—

It enters a canal in the bottom of the Meatus internus expressly intended for it, and directs its course forwards towards the hiatus Fallopii, where it forms a ganglifform swelling and receives a small branch from the Vidian. It then curves backwards towards the Tympanum and descends along the inner wall of that cavity to the Stylo Mastoid foramen, through which it emerges into the Parotid gland, cropping the external jugular vein and external Carotid artery, and at the ramus of the lower jaw, divides into two trunks, the Temporo-facial & Cervico facial. The trunks immediately split into numerous branches, which form looped communications with each other, and various anastomoses with the Fifth, and spreads out upon the side of the face; The Temporo fa-

cial upon the upper half of the face and Temple, and the Cervico-facial upon the lower portion of the face and Neck— Before the Nerve divides into these trunks it gives off a posterior auricular branch which ascends behind the Ear, and communicates with filaments of the Pneumogastric, and sends branches to the external Ear. It gives off a branch also to the Stylo hyoid Muscle, and another to the digastric Muscle. Within the aqueduct of Fallopii it gives a branch to the Stapedius, and another to the chorda Tympani; which passes through the Tympanum to the Opening in the fissura Glaseri and joins the Gustatory Nerve. Enclosed in its sheath, it descends into the Submaxillary gland & unites with Submaxillary ganglion. This Nerve is dependent upon

the fifth for a perfect knowledge of the muscles over which it presides. We next notice the Physiology of this nerve. First being directly connected with the Brain, it acts as a Medium, and gives us expression which has been said to be an Index to the Mind, owing to the many States of which, can be made known by it, and from the further fact, that we can judge of the natural turn of Mind which an individual possesses. In the loss of this then, while it would not involve the loss of any of the vital functions essential to life, would deprive our race of their original beauty and perfection. While this is very desirable, and should be the constant care of the Surgeon to preserve, it is not of the same importance as other cases

quences which would result from a division of this Nerve. We consider that of Respiration of paramount importance In ordinary respiration this Nerve is not called into play; but when by exertion of the Body, the circulation is increased, and a proportionable amount of aeration is required, the Muscles over which this Nerve presides is brought into play. That this is so, is proven by the daily experience of every one, though we can not properly appreciate it until this Nerve is paralyzed. Now this modification of respiration, is directly under the control of the Will, and can be varied to suit any emergency. Paralysis of this Nerve, that would deprive it of its influence in respiration, would involve

the loss of the proper exercise of, if not the functions of the two Special Senses Smell & Taste. We would be unable to draw air briskly up to the Olfactory Nerve, and it would not respond to odors, unless they were so brought The Lips would flap loosely, and food would lodge between the cheeks and gums. The angles of the Mouth would hang down motionless, except in an attempt to blow or whistle, when they would be moved by the expired air. This being the case, we would loose the power of Speech, not being able to move the Lips to modify Sounds By such paralysis, we would also loose the power of lighting up the face with a Smile, and Expression would be very materially interfered with

not so much however, as paralysis of the branches of its distribution to the Eye, for by this we can express the Emotions of the Mind, after we are deprived of the power of Speech. But for this Nerve the Eye would remain open & foreign matter coming in contact with it, would cause thickening and consequent Opacity of the Cornea. The Tears would run down and excoriate the Cheek. The face would present a characteristic vacant look and the Eye an unmeaning Stare, and consequently the power to make known the States of the Mind would be lost, for this is the only Medium, through which it can issue its Mandates. Its Origin from the Brain is marked in the groove between the Corpus Olivare & Restiforme

the Fibres of which diverge and converge to form the Cerebrum and Cerebellum, which are regarded as as the center of the Cerebral System of the Nerves of Special Sense, and of Volition of the Intellect, and of the passions of pleasure and of pain. By its means we are placed in relation to all that is external. We believe the Brain to be the Seat of the Mind, and that impressions made upon the Brain, developes the Mind and this development constitutes the Intellect. If then this Nerve is directly under the control of the ~~Will~~, and guards all the Channels through which impressions can be made upon the

Mind by external objects, is not its perfection necessary, in order to the recognition of impressions, of which the Mind can take cognisance, as well as to the proper exercise of all the organs of Special Senses. We have noticed the distribution of this Nerve to all the Muscles concerned in Respiration and Expression & the consequences of its division to both. When one side of the Nerve is paralyzed, and the other lighted up with a Smile, the paralyzed side is greatly exagerated. We notice now the other distributions of this Nerve. The movements of the internal Ear that appreciate the undulations of Sound, depend altogether on this Nerve. Yet we can not modify its action. Neither can we that of the Uvelae, the Movements of which dep-

ends upon this Nerve. These distributions call for another classification, as we have no control over them. Division of the branch distributed to the Ear would involve the loss of its function, and as a consequence the power of Speech from the Man not being able to hear himself Speak or Others Speak to him he would soon cease communicating with his friends in this manner —

There is a branch of this Nerve which descends, with the Gustatory, to the Tongue division of which would not only affect the power of Speech, but the function of ~~the Organ~~ of Taste, in so far as it depends upon the Solution of Sapid Substances —

We have now noticed the distribution of this Nerve. The important part

it plays in enabling the organs of Special Sense to perform properly their functions, and the consequences of its division. We have adopted the classification of those authors, who regard this as a division of the Seventh pair, and also as a Nerve of motion. Now as a Nerve of Motion it should not be regarded independent of the fifth Nerve, because, as already stated, it is dependent upon it for a knowledge of the Muscles over which it presides. In paralysis of this Nerve we would in the first place lose the impression of the States of the Mind and with it the power of the Mind to convey impression to

the Brain. So we would not only suffer physically but Mentally. The proper exercise of the functions of the Special Senses would also be interfered with, if not lost. If such a state of things was not followed by death, it would deprive us of all of which it would be desirable to live; especially to the Lover as he can no longer hear the foot-fall of his Intended, nor read the emotions of her Mind in Expression, nor feast the beautiful Rose-gay, nor listen to her musical Voice. Then. let us as Surgeons Study to preserve it, that we may not detract from the happiness of our fellow Men— Respectfully

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