

AN
INAUGURAL DISSERTATION

ON
*Paralysis of the third pair of
Nerves consecutive to Neuralgia
of the fifth pair.*

SUBMITTED TO THE
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185

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The Paralysis of the third Pair of
Nerves Consistent to Neuralgia
of the fifth Pair.

The nerves have been the Subject
of frequent inquiry whilst in-
vestigating the local predomina-
nt Symptoms of many diseases,
But as yet, they have not received
that separate and isolated inves-
tigation which their importance
demands. Their pathological State
in disease is undiscovered, and
the relation which may exist
between any given Malady and
an uniform alteration in the
respective nerves. Has not been
satisfactorily demonstrated.
Our error and ignorance upon this

points may be attributable to the fact, that we assign to the nerves offices entirely too limited.

Our medical writers frequently compare the nerves to telegraphic wires which transmit intelligence to and from the central organs. Thus making them mere passive agents, answering no purpose in the physical economy than that of conductors. Such a comparison is exceedingly unhappy, as it circumscribes in a very limited manner the physiological action of, the nerves, and is calculated to put a quietus to this kind of investigation. To seek for material derangement

3

in any particular nerve or set
of nerves as deduced from sym-
ptoms, and to treat diseases
with a direct reference to this
morbid state is an incognita
in theory or practice, if the nerves
do not take on inflammation
as other organs and present
and present such an
appearance upon an anatomic
examination, it is set down
as a stubborn medical truth
that they are not susceptible
of disease but act only as
conductors of morbid impres-
sions. As an instance of this
kind, Dr Albers tells us that
he examined the legs in
posty seven children who

4

died of whooping Cough, and found them perfectly normal in forty three. He would have us to understand by normal, that they were not red and swollen, the two essentials to an abnormal state in the mind of this physician. The investigations and deductions are of the same class. And so of many others. They begin the investigation of the nerves of all Coelasa with the expectation of discovering inflammation, and if this is not discovered they reach the conclusion immediately, that the nerves are not diseased. They first form this theory and afterwards deduce

erroneous conclusions from nature
 and facts to support it. It is
 erroneous to suppose that all the
 parts of the human organism
 are even susceptible of like
 pathological changes. It is not
 less erroneous to suppose that
 we can discover every pathological
 change by an actual examination
 of the dead subject. Many
 changes must necessarily take
 place in the living subject
 which will not be manifest
 upon the dead. Gravitation is
 known only by its effects. So
 are many pathological states
 of the different organs made
 manifest by symptoms and
 signs on the living subject.

In elucidation of the position assumed we will examine in a short way a relationship which exist between paralysis of the third pair with neuralgia of the fifth. Trifacial neuralgia has been little studied as regards the disorders which it produces beyond the nerve it affects, but which form a very interesting and curious part of its history. It is truly remarkable that a lesion, limited to a few filaments of the fifth. Crn. by a retrograde repetition of morbid actions, propagate itself to the nervous centers and induce the

1
Most extensive, multiplied,
and serious accidents, such
as the loss of speech or power
of deglutition, excessive dys-
pnoea, paraplegia, violent
convulsions, emprosthotonos,
furious delirium. That these
fearful symptoms are due
to simple lesion of some
of the trifacial filaments,
is evident from the fact,
that when they are divided
by section extending to the
bone, the accidents, which
may have resisted all medi-
cal appliances, disappear im-
mediately. We could hardly
suppose that such grave dis-
turbances of sensibility and

Motion were dependent upon an old Contusion of a few nervous filaments.

Let us examine a case of this kind: A gentleman of a very nervous temperament, was the Subject of paroxysmal fits of dreadful violence on the left Side of the Head and face, especially in the vicinity of the supra-orbital foramen, and in the teeth of the upper jaw. The left eye became affected with diplopia, but presented no deviation from its normal direction. The Sensibility of the left Cheek was entirely gone, as also of the nostril,

although he could still perceive odors. He could open his jaws only to a very slight extent. Compression of the frontal nerve caused great pain, but immediately and as long as it was continued the diplopia ceased. This compression could not be employed as a remedial means in consequence of the great pain it gave rise to, but the patient obtained considerable ease during a paroxysm by introducing a small piece of wood between two of his teeth. Blisters, purgatives and stimulating being used, the pain was partially relieved and sensibility restored.

18

but the diplopia remained
and the globe of the eye be-
came smaller, and drawn
inwards, the upper eyelid be-
ing also paralysed, so that the
eye was kept shut.

In this case it is very evident
that the neuralgia of the fifth
pair preceded the paralysis
of the third. But the qu-
estion naturally arises, what
is the explanation of the occur-
rence. The trifacial nerve
and Common Motor oculi
meet in the ophthalmic gangl-
ion, the former furnishing
it the sensitive root by the
nasal branch, the latter the
motor root - from its inferior.

branch. A reflex morbid action may take place within this ganglion by which the affection which is expressed in the sensitive nerve by pain or anaesthesia, is transmitted to the motor nerve, in which it is expressed by convulsion or paralysis. The Symptomatology of the motor, as of the sensitive nerves, is of two opposite kinds; pain and anaesthesia for the latter, Convulsion and paralysis for the former.

This hypothesis is consistent with the most plausible theory of the functions of the nervous ganglia, true miniature brains, as

they have been called, for the regulation of special actions; receiving impressions by filaments continued from the sensitive roots, and conveying these by the motor filaments; presiding over the nutritive phenomena by their grey fibers, and only advertising the brain proper of what is occurring in their localities, under extraordinary circumstances. In this way the ophthalmic ganglion, in particular, would be affected in the relations prevailing between the retina and the iris, and certain muscles

of the eye. Advertised of the vicissitudes of sensibility of the retina by its connection with the optic nerve, it reacts upon the iris harmonizing the pupil according to the degree of sensibility of the retina and acts reflectively by its motoric root upon the muscles of the eye which are influenced by the third pair.