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SPINAL INJURIES EXTERNAL TO THE SPINAL CORD.*

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PROGRESSIVE study of trauma of the rachidian structures has, of late years, become a subject of more than passing interest to practitioners; because, since the enormous expansion of every description of railroad traffic in this country and the erection of buildings of great height, the number of serious spinal traumatisms has greatly enlarged.

Structure and Function.—In order to intelligently acquaint ourselves with the character of the primary pathological conditions succeeding rachidian injuries, it is well that an outline of structure and function be briefly considered. At the outset let us note that the spinal architecture in man presents several special and unique characters; hence we must exercise a prudent reserve when we assume to apply the deductions derived from deliberately inflicted traumatisms on the lower animal to grave spinal injuries in the human being.

In man the vertebral column occupies a vertical position resting on two supports. It is a flexible, tubular pyramid, its body being composed of a composite structure without any regularly constituted articulations. About two-thirds of the vertebral column is composed of osseous tissue, and one-third intervertebral substance. The osseous spines and arches posteriorly are jointed.

Although of great strength, the spine is in a large degree elastic and resilient. Within this osseo-cartilaginous cage securely guarded and deeply buried, is the medulla-spinalis, surrounded

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