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ON A GIANT-CELLED RHABDOMYO SARCOMA FROM THE
TROUT.

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The subject of tumours derived from striated muscle is one that is still involved in considerable uncertainty. French pathologists of the present time, more particularly, report numerous cases of sarcoma which they regard as directly derived from muscle tissue elements, but this view is not by any means universally accepted. It may be laid down as a general rule that the more highly differentiated a tissue, the less is its tendency to afford neoplasms. When we encounter indubitable tumours, containing more or less imperfect but recognizable striated muscle elements, these, with the rare exceptions, are not in association with the ordinary muscles of the body, but are of the nature of mixed tumours, derived, it would seem, by displacement of cells capable of giving rise to striated muscle elements during the course of development. Most often in such tumours there is an admixture of cells of other orders, cells of a sarcomatous type, gland cells and, it may be, bone and cartilage and other tissue elements.

Another feature that we may lay down as characteristic of tumours in general is that the cells composing those tumours represent more or less faithfully some stage of development short of the perfect adult type. If we study the development of striated muscle, we find that there is a pre-existing stage in which the sarcoblasts, the embryonic cells giving rise to this particular tissue, become multinucleate, become, in short, giant cells. In fact, the adult muscle fibre is itself multinucleate. We should expect, therefore, were tumours derived from striated muscle at all common, to find giant-celled growths originating in association with the striated muscle in man. As a matter of fact, in the ordinary rhabdomyoma of man we encounter not infrequent multinucleate cells, but to my knowledge a tumour composed wholly of these,— what may