# GLOMUS TUMOURS WITH DISUSE ATROPHY (A case report)

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### Summary

A case of painful glomus tumours who developed disuse atrophy of the leg and improved remarkably after the surgical excision of the tumours is reported.

Glomus tumours are excruciatingly tender and produce varying degrees of pain (Sutton<sup>1</sup>, Layman & Peerson<sup>2</sup>). Some times pain may be such that an extremity develops disuse atrophy and weakness (Overdalhoff and Schutz<sup>3</sup>). The present case will be of interest having disuse atrophy of the leg due to the painful glomus tumours.

## Case Report

A 28 years man came to our O. P. D. with pain and wasting of his right leg-The pain started 8 years back in the right leg which used to increase on walking or pressing the particular areas. The pain used to become so agonising at times that he became scared and started moving with sticks putting less and less weight on the leg. Three years later he noticed gradual thinning and weakness of the leg which ultimately compelled him to have medical consultation and thus came to JIPMER.

On examination, a young man of average build and nutrition, looking well except his right leg which was

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thinner than the left leg. No dis-colouration or swellings were visible. palpation, two firm very tender mobile dermal nodules of .5 to 1 cm in size were felt, one on the middle of shin and second 2" above the A tender spot but no malleolus. nodule was spotted on the lateral side of the leg 1" above and lateral to lateral malleolus over the peroneal muscles. On measuring the girth of the leg 4" below the tibial tuberosity was 4" less and the girth of thigh 6" above the medial epicondyle (adductortubercle) was 3" less than that of left leg and thigh respectively. There were wasting of all the groups of muscles of the leg. Power was grade IV. Tone was normal. Reflexes and sensations were normal. No bony or spinal defects were detected. Examination of other systems was found to be normal.

Routine investigations of blood, urine and stool were normal. Blood E.S.R. 8 mm 1st hour, S. T. S. non-reactive. X-ray of spine normal. Histopathology shows many small endothelium lined spaces with clusters of glomus cells in between them (Fig. 1) Glee's stain shows presence of nerve fibres in the islands of glomus cells (Fig. 2).

Treatment and follow-up: We removed all the 3 tumours.

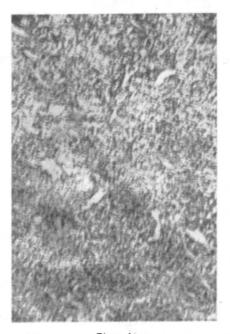


Fig. 1

Shows many small endothelium lined spaces with clusters of gloums cells in between them. H&E 10 x 10

months later when we called the patient for follow-up, to our surprise he was not only free from pain but also using his leg normally without the help of any stick.

#### Discussion

Generally solitary tumour is pink or purple and multiple tumours are dark blue in colour (Rook<sup>4</sup>). Sometimes as in our case no colour change or swelling is visible. In such cases the presence of severe pain with a very localized and sensitive triger point should lead to the suspicion of glomus tumour (Strahan and Bailie<sup>5</sup>). The pain has been so exquisite in some patients that amputation has been demanded or suicide contemplated (Caughey et al<sup>6</sup>). Disuse atrophy is a rare complication. In our case we could not find any other cause of disuse atrophy by clinical or laboratory tests except the glomus tumours. The improvement in the leg after the

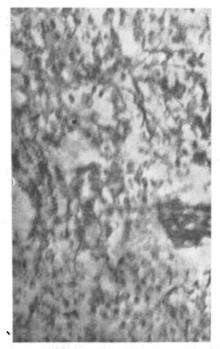


Fig. 2

Glee's stain showing presence of nerve fibres in the island of glomus cells. 10 x 10

removal of these tumours is strongly in favour of our diagnosis.

#### Acknowledgment

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