

Giant Lipoma of the Posterior Neck - A Rare Entity.

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Abstract: Lipoma is one of the commonest benign mesenchymal tumours in body and found almost in all organs where fat exists. This lesion is often asymptomatic except in cases of enormous masses compressing nervous-vascular structures. They are found relatively rarely on the posterior part of the neck. Surgical intervention in these tumours is very challenging because, sometimes, extension to the spinal cord and malignant transformation may occur especially in old age. Knowledge of the anatomy and meticulous surgical techniques are needed for such giant lipomas.

Key Words: Lipoma, Posterior Neck

INTRODUCTION

Lipomas infrequently occur in the head and neck. Giant lipomas are defined by Sanchez *et al* as lesions with size of at least 10 cm in one dimension or weighing a minimum of 1,000 g.¹ A large neck mass (>10 cm) with a rapid growth rate should raise concerns about a possible malignancy.¹ Although the diagnosis is mostly clinical, imaging tools are useful to confirm the adipose nature of the lesion and to define its anatomic border. Surgical excision of a lipoma is often used as the definitive treatment. We present the case of a 60 year old man who presented with a giant Neck lipoma for the past 7 years. The 5.5kg mass was successfully removed with excellent results and no functional impairment.

CASE REPORT

A 60year old male presented to our surgical outpatient department with a huge lump at the back of his neck for the last 7 years. On local examination of the neck, there was a 22 cm × 12 cm-sized swelling at the posterior side of the neck [Fig. 1]. It was nontender and soft to firm in consistency. Dilated veins were present in the skin. There was no regional lymphadenopathy. Fine needle aspiration revealed mature lipocytes indicative of lipomatous lesion. Contrast Enhanced Computed Tomography Scan of the neck revealed a giant subcutaneous lipoma at the nape of Neck without septations. There was no communication with the spinal cord. After intubation with general anaesthesia, the patient was positioned in a prone position. An elliptical transverse incision was given at around the base of the lump. The superior and inferior skin flaps were raised. Separation of lipoma from the surrounding tissues was performed with sharp and blunt dissection. The redundant skin was removed and the upper and lower skin flaps were stitched together. The resected mass was 5.5 kg in weight and 22 cm × 12 cm in diameter [Fig. 2]. The postoperative period was uneventful. Patient was discharged on the 10th postoperative day. Pathological analysis of the resected mass revealed mature, proliferative lipocytes with no cellular atypia, and it was diagnosed as benign giant lipoma.



Fig 1: Lipoma at the posterior Neck

DISCUSSION

Lipoma is one of the commonest benign mesenchymal tumours in the body

composed of mature adipose cells. It is found in almost all the organs of the body where normally fat exists that is why it is also known as ubiquitous tumour or universal tumour.² Common locations for lipomas are the back, arm, shoulder, anterior chest wall, breast, thigh, abdominal wall, legs, forehead and face, in decreasing order of frequency.³ Only approximately 25% of the lipomas and their variants arise in the head and neck region.⁴ Most of the lipomas present as small subcutaneous swellings without any specific symptom. Giant lipomas, though rare, can present in thigh, shoulder, trunk or Neck. Clinical features of these giant lipomas are mainly because of their size which includes pain because of stretching of adjacent nerves, restriction in movements of the part involved or social embarrassment because of mere size of the swelling.⁵ Most lipomas pose no diagnostic dilemmas. However, when presented with large (>10 cm) or rapidly growing masses, especially of the head and neck region, one should be concerned about a malignancy. Owing to the specific location of Head and Neck tumours, it is necessary to perform proper diagnostic tests to confirm the assumed nature of the tumours and exclude possible communication with the spinal canal. Improved diagnostic imaging technology such as computed tomography (CT) or magnetic resonance imaging (MRI) has increased the utility of these imaging techniques in the diagnosis of complex or unusual neck masses. Removal of those tumours is not difficult because of a clear demarcation of the surrounding tissues. Complete excision is the treatment of the choice for giant lipoma although liposuction for such tumours has also been reported. Although reports of giant lipoma weighing 2.4 kg are there in literature but to our best knowledge this is the largest and heaviest lipoma involving the Neck region.⁶

CONCLUSION

Lipoma represents the most frequent tumour of the soft tissues. Giant lipomas are a rare entity. Although reports of giant lipomas involving the Neck region have been documented, it's for the first time that we report a lipoma of the Neck region of this magnitude. Surgery remains the treatment modality here also.

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NOBEL PRIZE IN MEDICINE

Stem Cell Pioneers win Nobel Prize in Medicine

A British researcher and a Japanese scientist won the Nobel Prize in physiology or medicine on Monday for discovering that ordinary cells of the body can be reprogrammed into stem cells, which then can turn into any kind of tissue - a discovery that may lead to new treatments. Scientists want to build on the work by John Gurdon and Shinya Yamanaka to create replacement tissues for treating diseases like Parkinson's and diabetes, and for studying the roots of diseases in the laboratory - without the ethical dilemma posed by embryonic stem cells. In announcing the \$1.2 million award, the Nobel committee said the discovery has "revolutionized our understanding of how cells and organisms develop". Gurdon showed in 1962 - the year Yamanaka was born - that the DNA from specialized cells of frogs, like skin or intestinal cells, could be used to generate new tadpoles. That showed the DNA still had its ability to drive the formation of all cells of the body. At the time, the discovery had "no obvious therapeutic benefit at all", Gurdon told reporters in London. "It was almost 50 years before the value - the potential value - of that basic scientific research comes to light," he said. In 1997, the cloning of Dolly the sheep by other scientists showed that the same process Gurdon discovered in frogs would work in mammals. More than 40 years after Gurdon's discovery, in 2006, Yamanaka showed that a surprisingly simple recipe could turn mature cells back into primitive cells, which in turn could be prodded into different kinds of mature cells. Basically, the primitive cells were the equivalent of embryonic stem cells, which had been embroiled in controversy because to get human embryonic cells, human embryos had to be destroyed. Yamanaka's method provided a way to get such primitive cells without destroying embryos. "The discoveries of Gurdon and Yamanaka have shown that specialized cells can turn back the developmental clock under certain circumstances," the panel said. Gurdon, 79, has served as a professor of cell biology at Cambridge University's Magdalene College and is currently at the Gurdon Institute in Cambridge. Yamanaka, 50, worked at the Gladstone Institute in San Francisco and Nara Institute of Science and Technology in Japan. Currently at Kyoto University, he is the first Japanese to win the Nobel medicine award since 1987.