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A Case of Lipoma in the Deep Part of Neck

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ABSTRACT. It is comparatively rare that lipoma is found in the deep part of neck, though lipoma is often found in parts of back, neck, breast, etc. And so the authors reported a case of lipoma in 71-year-old woman that was made the diagnosis of lipoma in the deep part of neck, from the clinical symptoms and CT examination, and was confirmed histologically after the enucleation under general anesthesia.

Key words : Lipoma - Deep part of neck - CT scan

Lipoma is usually benign tumor and is often found in parts of back, neck, breast, etc. where adipose tissue is normally present, but it is comparatively rare that lipoma is found in the deep part of neck and particularly huge. Therefore, we would like to report such a case that was treated in our hospital about two years ago.

CASE REPORT

A 71-year-old woman was admitted to the Kawasaki Medical School Hospital to complain of the huge and painless tumor in the right side of neck. She underwent the extraction of the small tumor in the right side of neck at eight years of age, but the histological diagnosis was unknown. Besides, she suffered from tuberculosis at forty, uterine cancer at fifty and fracture of the upper arm at sixty-four years of age, and recovered from all of these diseases by the treatment.

There was no family history to be mentioned especially.

By the way, she suspected the painless tumor of about the size of 0.5×0.5 cm in the right side of neck at about sixty-four years of age. Thereafter the tumor increased in size gradually, while she let it alone for about seven years until seventy-one years of age.

On admission, the tumor of the size of 8×8 cm was palpable under the sternocleidmastoid muscle in the right side of neck (Figs. 1, 2). It was soft with regard to the consistency, smooth to the surface and clear to the boundary. It didn't have the pulsation, fluctuation and pain by pressure, though it was movable. No other abnormality was found in serological examination except the slight anemia. In the X-ray photograph of the neck, calcification of the tumor and transformation or displacement of the trachea were not found, and

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Fig. 1. Front view.



Fig. 3. Low density area in the right side of neck (arrows).



Fig. 2. Right side view.



Fig. 4. Gross specimen.



Fig. 5. Mature adipose cells.

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only swelling of the soft tissue was recognized.

CT scan of the neck demonstrated a low density area in the right side of neck that had been located under the sternocleidmastoid muscle and had slightly pressed the inside organs (Fig. 3). Coefficient of X-ray absorption in the low density area demonstrated the grade of minus one hundred and ten, and this grade coincided with the fact that coefficient of X-ray absorption of fat was below minus fifty.

Therefore we diagnosed this tumor to be lipoma, and enucleated it easily under general anesthesia, as there was little adhesion to the adjacent tissues.

The enucleated specimen was $8 \times 8 \times 3$ cm in the size, 70 gram in the weight, yellow in the color, soft in the solidity and smooth in the surface, and several constricted parts were observed (Fig. 4).

Histologically mature adipose cells were arranged like the meshes of a net and there was no finding of malignancy. Though the capsule was not recognized clearly, a little fibrous tissue was found around (Fig. 5).

DISCUSSION

Frequency: It has been reported by Enjoji *et al.*¹⁾ that hemangioma and lipoma had the greatest number, each comprising about 20% in a statistic analysis of benign soft tissue tumors in Japan.

Sex ratio : Enjoji *et al.*¹⁾ have reported male : female was 1 : 0.9, while Kasahara²⁾ has reported it was 2 : 1.

Age : Lipoma is able to occur at any age, but is more common after the age of 40 years in a report of Bennhoff *et al.*³⁾ According to Enjoji *et al.*¹⁾ about 60% ranges from 30 to 60 years with an average age of 42.3 years.

Location : Enjoji *et al.*¹⁾ have reported the occurrence is relatively frequently located in the back, neck, breast, face, thigh, etc. Nakamura *et al.*,⁴⁾ however, have described lipoma is rare in otorhinolaryngeal area in a statistic observation of neck tumors, while it is fairly frequently found in surgical area. Lipoma of otorhinolaryngeal area is rare in the area of the parotid gland,⁵⁻⁶⁾ epiglottis,⁷⁾ internal auditory canal,⁸⁾ etc. and the huge lipoma is also relatively rare in the deep area of the neck.

Progress: Kasahara²⁾ has described lipoma in early childhood enlarges slowly and increases in number to be found out as lipoma with an age.

Our case underwent the extraction of the first small tumor in the almost same area of neck at eight years of age, though the histological diagnosis was unknown. It is suspicious that the tumor was lipoma. If it was so, the next huge tumor might be the recurrent lipoma or double lipoma.

Diagnosis : It makes the diagnosis easy that lipoma enlarges slowly as years go by, and it is spherical or oval, solid, elastic, soft and movable by the palpation, but it should be differentiated from cyst, hemangioma, etc. It is considered to be advisable to diagnose using the method other than the tentative puncture, though it is a reliable method for the differential diagnosis as it is possible to confirm the contents in the tumor.

The differential diagnosis is almost possible using inspection, palpation, X-ray photograph, ultrasonic examination, CT scan, etc. In particular CT scan is very useful for the differential diagnosis.

Treatment : Enucleation is considered to be the most appropriate for the treatment of lipoma, as generally there is little combination of the thin capsule and the adjacent tissues and the recurrence is uncommon after the enucleation of the lipoma.

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