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DESMOID TUMOR OF THE NECK: A CASE REPORT.

General Surgery

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ABSTRACT

Desmoid tumors represent a unique class of rare pathologies originating from the musculoaponeurotic tissues across the body. Characterized by a slow growth rate, these tumors are histologically non-malignant but exhibit aggressive local behavior, often invading nearby structures. With an annual incidence rate of approximately 2.4 to 4.5 per million, desmoid tumors primarily manifest in the intra-abdominal area, with only 7-25% occurring in the head and neck region. The complexity of their invasive nature and recurrence propensity necessitates the adoption of an integrated treatment approach. However, specific guidelines for managing desmoid tumors in the neck area are scarce due to their rarity. This report documents the successful treatment of a left postero-lateral neck desmoid tumor through extensive surgical removal.

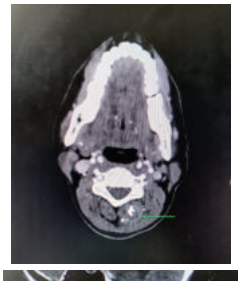
KEYWORDS

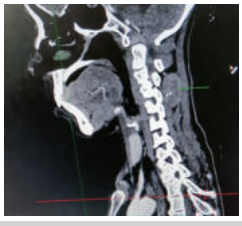
INTRODUCTION

Desmoid tumors, also known as aggressive fibromatosis, pose a significant clinical challenge due to their unpredictable behavior, rarity, and the complex anatomical locations they can affect. Despite being benign in their histological outlook, these tumors carry a high risk of local invasion and recurrence, complicating treatment options and patient management. The incidence of desmoid tumors in the general population is notably low, with an estimated 2.4 to 4.5 cases per million annually, further emphasizing the need for detailed case reports to enhance understanding and management strategies. The occurrence of desmoid tumors within the head and neck region is particularly uncommon, accounting for a small fraction of cases, which presents a unique set of challenges due to the critical structures in this area.

Case Report

We encountered a case involving a 40-year-old woman who reported a progressively enlarging mass in her left neck over a year. Physical examination revealed a firm, non-tender mass on the left postero-lateral side of the upper neck, adherent to both the skin and deeper structures. USG revealed 19 x 25 x 23 sized hypoechoic lesion with few calcified foci noted in left posterior region of neck. CECT Neck revealed 2.3 x 2 x 3.4 cm suggestive of Benign Mesenchymal tumor. MRI Neck highlighted intramuscular lesion in the left paramedian posterior paraspinous muscles measures 2.3 x 1.3 x 3.3 cm. It typically shows low signals on both T1W & T2W images. No intraosseous or intraspinal extension. Cervical vertebrae & spinal canal appear normal. This lesion is located opposite C3 level & is limited to signal muscle group [Semispinalis]. These findings strongly favour benign density fibrous mesenchymal tumor [Desmoid tumor].





Guided by radiological and histopathological evaluations, the mass was completely excised through surgery. The patient demonstrated significant recovery over a year of follow-up.

DISCUSSION

Predominantly affecting females, desmoid tumors are most frequent among individuals aged 15 to 60. These tumors are categorized based on their location into intra-abdominal, abdominal wall, and extra-abdominal types. The latter, encompassing about a third of all cases, frequently occurs in areas like the head and neck, shoulders, pelvic region, and limbs. Notably, the neck is a prevalent site, especially its anterio-lateral aspect, contrasting with the postero-lateral location seen in our patient. The dense anatomical features of the head and neck area underscore the tumor's potential for significant local impact, despite its benign histological appearance, which typically shows spindle-shaped cells.

The cornerstone of treatment is surgical removal, often complemented by additional modalities due to the tumor's tendency to infiltrate nearby vital structures, making complete resection challenging. Post-surgery, radiation therapy is commonly applied to manage residual or recurring disease.

CONCLUSION

Though rare and benign, desmoid tumors exhibit a distinctive biological behavior, including a tendency towards local recurrence. This has led to a consensus on the necessity for a multi-faceted treatment strategy, generally starting with surgical intervention followed by radiation to address any remaining or returning tumor mass. Continuous clinical and radiographic monitoring is critical for managing these patients due to the unpredictable nature of the disease.

Conflicts of interest

The authors declare no conflicts of interest.

Footnotes

This study was carried out at the Mathura Das Mathur Hospital, Jodhpur, Rajasthan, India.

Ethics Statement: The authors retain informed consent signed by the patient for authorizing the data publication and the manuscript is as by the Institutional Ethics Committee rule.

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REFERENCES

1. Koukoutsis I, Pappas A, Karanikas G, Kotzadimitriou K, Chrysikos J, Tzika S, et al. Desmoid tumor of the supraclavicular region: a case report. Cases J. 2009;2:7222. [PMC free article] [PubMed] [Google Scholar]
2. Sobani ZA, Junaid M, Khan MJ. Successful management of aggressive fibromatosis of

the neck using wide surgical excision: a case report. J Med Case Rep. 2011;5:244. [PMC free article] [PubMed] [Google Scholar]
3. Wang CP, Chang YL, Ko JY, Cheng CH, Yeh CF, Lou PJ. Desmoid tumor of the head and neck. Head Neck. 2006;28:1008–1013. [PubMed] [Google Scholar]
4. Hosalkar HS, Fox EJ, Delaney T, Torbert JT, Ogilvie CM, Lackman RD. Desmoid tumors and current status of management. Orthop Clin North Am. 2006;37:53–63. [PubMed] [Google Scholar]
5. Nuyttens JJ, Rust PF, Thomas CR, Jr, Turrisi AT., 3rd Surgery versus radiation therapy for patients with aggressive fibromatosis or desmoid tumors: A comparative review of 22 articles. Cancer. 2000;88:1517–1523. [PubMed] [Google Scholar]
6. Constantinidou A, Jones RL, Scurr M, Al-Muderis O, Judson I. Advanced aggressive fibromatosis: Effective palliation with chemotherapy. Acta Oncol. 2011;50:455–461. [PubMed] [Google Scholar]
7. Sze H, Yeung MW. Fibromatosis of the neck causing airway obstruction managed effectively with weekly low-dose methotrexate and vinblastine. Hong Kong Med J. 2009;15:221–223. [PubMed] [Google Scholar]
8. Huang PW, Tzen CY. Prognostic factors in desmoid-type fibromatosis: a clinicopathological and immunohistochemical analysis of 46 cases. Pathology. 2010;42:147–150. [PubMed] [Google Scholar]
9. de Bree E, Zoras O, Hunt JL, Takes RP, Suárez C, Mendenhall WM, et al. Desmoid tumors of the head and neck: a therapeutic challenge. Head Neck. 2014;36:1517–1526. [PubMed] [Google Scholar]
10. Waddell WR, Kirsch WM. Testolactone, sulindac, warfarin, and vitamin K1 for unresectable desmoid tumors. Am J Surg. 1991;161:416–421. [PubMed] [Google Scholar]