

CASE STUDY

Lipoma: A Common Neoplasm

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ABSTRACT

BACKGROUND

In this essay, the manifestations, possible aetiologies, diagnostic approaches, treatment methods and complications of lipomas are reviewed.

METHODS

A thorough review of the literature is conducted, a series of 12 patients are outlined and briefly examined.

RESULTS

Lipomas may present as asymptomatic tumors or produce distressing signs and symptoms such as pain, swelling and overgrowth. Some lipomas may be identified by physical examination alone. However, magnetic resonance imaging (MRI) is the conclusive method of evaluation especially in deeper lesions.

CONCLUSION

In the absence of concerning indications or cosmetic concerns, observation stays the standard of care. When pain, itching, compression symptoms or disfigurement impress the patient, surgical removal and pathology assessment are typically recommended. Malignant transformation rarely occurs.

KEYWORDS

Neoplasms; Lipoma; Pathology

REFERENCES

1. Kosztyuova T and Shim TN (2017) Rapidly enlarging lipoma. Case Reports: BCR-2017.
2. Johnson CN, Ha AS, Chen E et al. (2018) Lipomatous soft-tissue tumors. JAAOS-Journal of the American Academy of Orthopaedic Surgeons 26(22): 779-788.

3. McFarland GB and Hoffer MM (1971) Paralysis of the intrinsic muscles of the hand secondary to lipoma in Guyon's tunnel. *Journal of Bone and Joint Surgery* 53(2): 375-376.
4. Brodovsky S, Westreich M, Leibowitz A et al. (1994) Adiposis dolorosa (Dercum's disease): 10-year follow-up. *Annals of plastic surgery* 33(6): 664-668.
5. Prado V, EA BP, Bussalleu A (2018) Familiar adenomatous polyposis: Report of 2 cases. *Revista de Gastroenterologia del Peru: Organo Oficial de la Sociedad de Gastroenterologia del Peru* 38(1): 78-81.
6. Baldino ME, Koth VS, Silva DN et al. (2019) Gardner syndrome with maxillofacial manifestation: A case report. *Special Care in Dentistry* 39(1): 65-71.
7. Barisella M, Giannini L, Piazza C (2020) From head and neck lipoma to liposarcoma: A wide spectrum of differential diagnoses and their therapeutic implications. *Current Opinion in Otolaryngology & Head and Neck Surgery* 28(2): 136-143.
8. Creytens D (2019) A contemporary review of myxoid adipocytic tumors. In *Seminars in Diagnostic Pathology* 36(2): 129-141.
9. Charifa A, Azmat CE, Badri T (2018) Lipoma pathology. Treasure Island (FL): StatPearls.
10. Weiss SW (2008) Benign lipomatous tumors. *Enzinger and Weiss's soft tissue tumors*: 429-476.
11. Phalen GS, Kendrick JI, Rodriguez JM (1971) Lipomas of the upper extremity: A series of fifteen tumors in the hand and wrist and six tumors causing nerve compression. *The American Journal of Surgery* 121(3): 298-306.
12. Nadar MM, Bartoli CR, Kasdan ML (2010) Lipomas of the hand: A review and 13 patient case series. *Eplasty* 10: e66.
13. Ameloot E, Cordier F, Van Dorpe J et al. (2022) Update of pediatric lipomatous lesions: A clinicopathological, immunohistochemical and molecular overview. *Journal of Clinical Medicine* 11(7): 1938.
14. Rydholm A and Berg NO (1983) Size, site and clinical incidence of lipoma: Factors in the differential diagnosis of lipoma and sarcoma. *Acta Orthopaedica Scandinavica* 54(6): 929-934.
15. Salam GA (2002) Lipoma excision. *American Family Physician* 65(5): 901.
16. Froimson AI (1987) Benign solid tumors. *Hand Clinics* 3(2): 213-217.
17. Phalen GS, Kendrick JI, Rodriguez JM (1971) Lipomas of the upper extremity: A series of fifteen tumors in the hand and wrist and six tumors causing nerve compression. *The American Journal of Surgery* 121(3): 298-306.
18. Panagopoulos I, Gorunova L, Agostini A et al. (2016) Fusion of the HMGA2 and C9orf92 genes in myolipoma with t (9; 12)(p22; q14). *Diagnostic pathology* 11: 1-6.
19. Chrisinger JS (2019) Update on lipomatous tumors with emphasis on emerging entities, unusual anatomic sites, and variant histologic patterns. *Surgical Pathology Clinics* 12(1): 21-33.
20. Berkovic SF, Andermann F, Shoubridge EA et al. (1991) Mitochondrial dysfunction in multiple symmetrical lipomatosis. *Annals of Neurology: Official Journal of the American Neurological Association and the Child Neurology Society* 29(5): 566-569.
21. Leiva SF, Navachia D, Nigro N et al. (2004) Lipoma in the thyroid?. *Journal of Pediatric Endocrinology and Metabolism* 17(7): 1013-1016.
22. Weinberg T and Feldman Sr M (1955) Lipomas of the gastrointestinal tract. *American Journal of Clinical Pathology* 25(3): 272-281.

23. Miyake O, Hara T, Matsumiya K et al. (1992) Adrenal myelolipoma associated with Cushing's syndrome: A case report. *Hinyokika kyo. Acta urologica Japonica* 38(6): 681-684.
24. Clayman E, King K, Harrington MA (2017) Corticosteroid-associated angiolipomatosis. *Eplasty* 17: ic9.
25. Garfinkel HA (1971) A massive lipoma in a patient receiving chlorpropamide therapy. *Postgraduate Medical Journal* 47(544): 137.
26. Brooke RI and MacGregor AJ (1969) Traumatic pseudolipoma of the buccal mucosa. *Oral Surgery, Oral Medicine, Oral Pathology* 28(2): 223-225.
27. Meggitt BF and Wilson JN (1972) The battered buttock syndrome-fat fractures a report on a group of traumatic lipomata. *Journal of British Surgery* 59(3): 165-169.
28. Herbert DC and DeGeus J (1975) Post-traumatic lipomas of the abdominal wall. *British Journal of Plastic Surgery* 28(4): 303-306.
29. Ngokwe ZB, Charles KL, Akumbom AH et al. (2023) Post-traumatic scalp lipoma: A case report. *Health Sciences and Disease* 24(4).
30. Ngokwe ZB, Kharim LC, Akumbom AH, et al. (2023) Post-traumatic scalp lipoma: A case report. *Oral and Maxillofacial Surgery Cases* 9(2): 100305.
31. Signorini M and Campiglio GL (1998) Posttraumatic lipomas: Where do they really come from?. *Plastic and Reconstructive Surgery* 101(3): 699-705.
32. Copcu E (2004) Sport-induced lipoma. *International Journal of Sports Medicine* 25(03): 182-185.
33. Copcu E (2003) Can intramuscular lipoma have a post-traumatic origin?. *British Journal of Dermatology* 149(5): 1084-1085.
34. Tiao WM, Yeh LR, Lu YC et al. (2001) Lipoma arborescens of the knee: A case report. *Journal of the Formosan Medical Association* 100(6): 412-415.
35. Cohen S, Ad-El D, Benjaminov O et al. (2008) Post-traumatic soft tissue tumors: Case report and review of the literature a propos a post-traumatic paraspinous desmoid tumor. *World Journal of Surgical Oncology* 6(1): 1-4.
36. Ewing J (1935) The modern attitude toward traumatic cancer. *Bulletin of the New York Academy of Medicine* 11(5): 281.
37. Warren SA (1943) Minimal criteria required to prove causation of traumatic or occupational neoplasms. *Annals of Surgery* 117(4): 585-610.
38. Posch JL (1956) Tumors of the hand. *Journal of Bone and Joint Surgery* 38(3): 517-562.
39. Leffert RD (1972) Lipomas of the upper extremity. *Journal of Bone and Joint Surgery* 54(6): 1262-1266.
40. James JJ, Robin A, Wilson M et al. (2008) The breast. In: Adam A, Dixon AK (Eds.), *Grainger & Allison's Diagnostic Radiology*. 5th (Edn.) Philadelphia, Pa: Elsevier.
41. Pant R, Poh AC, Hwang SG (2005) An unusual case of an intramuscular lipoma of the pectoralis major muscle simulating a malignant breast mass. *Annals of the Academy of Medicine of Singapore* 34(3): 275-276.
42. Weekes RG, McLeod RA, Reiman HM et al. (1985) CT of soft-tissue neoplasms. *American Journal of Roentgenology* 144(2): 355-360.
43. Egund N, Ekelund L, Sako M et al. (1981) CT of soft-tissue tumors. *American Journal of Roentgenology* 137(4): 725-729.

44. Halldorsdottir A, Ekelund L, Rydholm A (1982) CT diagnosis of lipomatous tumors of the soft tissues. *Archives of Orthopaedic and Traumatic Surgery* 100(4): 211-216.
45. Doms GC, Hricak HEDVIG, Sollitto RA et al. (1985) Lipomatous tumors and tumors with fatty component: MR imaging potential and comparison of MR and CT results. *Radiology* 157(2): 479-483.
46. Lee YH, Jung JM, Baek GH et al. (2004) Intramuscular lipoma in thenar or hypothenar muscles. *Hand Surgery* 9(01): 49-54.
47. Capelastegui A, Astigarraga E, Fernandez-Canton G et al. (1999) Masses and pseudomasses of the hand and wrist: MR findings in 134 cases. *Skeletal Radiology* 28: 498-507.
48. Lichon S and Khachemoune A (2018) Clinical presentation, diagnostic approach, and treatment of hand lipomas: A review. *Acta Dermatovenerologica Alpina, Pannonica et Adriatica* 27(3): 137-140.
49. Datir A, James SLJ, Ali K et al. (2008) MRI of soft-tissue masses: The relationship between lesion size, depth, and diagnosis. *Clinical Radiology* 63(4): 373-378.
50. Bancroft LW, Kransdorf MJ, Peterson JJ et al. (2006) Benign fatty tumors: Classification, clinical course, imaging appearance, and treatment. *Skeletal Radiology* 35: 719-733.
51. Amber KT, Ovadia S, Camacho I (2014) Injection therapy for the management of superficial subcutaneous lipomas. *The Journal of Clinical and Aesthetic Dermatology* 7(6): 46-48.
52. Redman LM, Moro C, Dobak J et al. (2011) Association of β -2 adrenergic agonist and corticosteroid injection in the treatment of lipomas. *Diabetes, Obesity and Metabolism* 13(6): 517-522.
53. Kopera D, Binder B, Toplak H (2006) Intralesional lipolysis with phosphatidylcholine for the treatment of lipomas: Pilot study. *Archives of Dermatology* 142(3): 393-403.
54. Rotunda AM, Ablon G, Kolodney MS (2005) Lipomas treated with subcutaneous deoxycholate injections. *Journal of the American Academy of Dermatology* 53(6): 973-978.
55. Drylewicz MR, Lubner MG, Pickhardt PJ et al. (2019) Fatty masses of the abdomen and pelvis and their complications. *Abdominal Radiology* 44: 1535-1553.
56. Sawhney KK, McDonald JM, Jaffe HW (1975) Liposarcoma of the hand. *The American Surgeon* 41(2): 117-120.
57. Sampson CC (1960) Liposarcoma developing in alipoma. *Archives of Pathology & Laboratory Medicine* 69: 506-510.
58. Panzarella MJ, Naqvi AH, Cohen HE et al. (2005) Predictive value of gadolinium enhancement in differentiating ALT/WD liposarcomas from benign fatty tumors. *Skeletal Radiology* 34: 272-278.
59. Mack LA, Crowe PJ, Yang JL et al. (2005) Preoperative chemoradiotherapy (modified Eilber protocol) provides maximum local control and minimal morbidity in patients with soft tissue sarcoma. *Annals of Surgical Oncology* 12: 646-653.
60. Loubignac F, Bourtoul C, Chapel F (2009) Myxoid liposarcoma: A rare soft-tissue tumor with a misleading benign appearance. *World Journal of Surgical Oncology* 7(1): 1-6.