A Solitary Nevus Lipomatosus Cutaneous Superficialis: A Rare Case Report

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ABSTRACT

Introduction: Nevus Lipomatosus Cutaneous Superficialis (NLCS) is a rare benign hamartomatous condition characterized by the presence of ectopic adipose tissue in the dermis. It was first reported by Haffman and Zurhelle in 1921. Clinically, it is classified into two types, the classical- Hoffman-Zurhelle or the multiple form characterized by groups of multiple non-tender, soft, yellowish or skin colored plaques. The other form of NLCS clinically manifest as a solitary pedunculated nodule or sessile papule.

Case report: We report the case of solitary NLCS in 40 years old male presenting as a solitary, pedunculated, soft, non-tender mass measuring 4×3×1cm on the right elbow. Microscopy shows the reticular dermis containing lobules of ectopic fat separating the dermal collagen bundles which suggest the diagnosis of NLCS.

Conclusion: The physicians should be aware of this rare condition because early recognition enables more conservative resection of tumor and less invasive reconstruction of the defect.

Keywords: Nevus Lipomatosus Cutaneous Superficialis, adipocytes, hamartoma

INTRODUCTION

Nevus Lipomatosus Cutaneous Superficialis (NLCS) is an uncommon benign hamartomatous condition characterized by ectopic adipose tissue in the dermis.¹ There is no gender predilection or hereditary predisposition of this disease. Clinically it is classified into two forms. The classical form is characterized by groups of multiple non-tender, soft, pedunculated, yellowish or skin colored papules, nodules or plaques. Classical NLCS is mostly reported to involve the pelvic or gluteal region but can also rarely occur on the abdomen, chest and face.² They are usually present at birth or emerge during the first two decades of life. It was first reported by Haffman and Zurhelle in 1921. The other form of NLCS manifests as a solitary dome shaped or sessile papule on the buttock and thigh.³ Unusual sites like scalp, axilla, knee, ear, eye, nose, clitoris and palm can also be involved.¹

The solitary form presents after the second decade of life. There is no gender predilection and patients are otherwise in good health.⁵ The main histological abnormality in either type of NLCS is ectopic fatty tissue in the upper dermis often not connected to the fat of the underlying subcutis.⁷ The proportion of dermal fat is variable ranging from less than 10% of the dermis to over 50%.² In our case ectopic adipose tissue was mainly seen around dermal blood vessels. Presumably fat cells in the dermis were the result of local heterotopic development of the adipose tissue. NLCS was presumed to be the result of displacement of subcutaneous...
adipose tissue embedded into the dermis. Recently electron microscopic findings strongly confirmed the perivascular origin of young adipocytes and the differentiation into mature fat.\(^4\)

NLCS should be differentiated from nevus sebaceous, fibroepithelioma, nevocellular nevi, focal epidermal hypoplasia and the dermal variant of spindle cell lipoma.

Nevus sebaceous contains skin appendages but no fat cells in the dermis. The solitary form of NLCS has a broad base when compared to fibroepithelioma. Dermal collections of the adipocytes are also present in nevi however the presence of nevus cells sometimes occupying a small area of the lesion helps in differentiation.

Focal epidermal hypoplasia also has fat in the dermis along with extreme attenuation of collagen. The dermal variant of spindle cell lipoma contains more spindle shaped cells and fibromucinous stroma.\(^1\)

Another peculiar variant of this condition is marked by excessive, symmetric circumferential folds of skin with underlying NLCS and affect the neck, forearms, lower legs and resolve spontaneously during childhood. It has been described as Michelin tire baby syndrome. This syndrome is inherited as an autosomal dominant trait and is characterized by deletion of chromosome 11.\(^5\)

For cosmetic purpose, surgical excision is the best choice of treatment.\(^6\)

**CONCLUSION**

The physicians should be aware of this rare condition because early recognition enables more conservative resection of tumor and less invasive reconstruction of the defect.

**REFERENCES**


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