

## PRIMARY LOCALIZED CUTANEOUS NODULAR AMYLOIDOSIS: CASE REPORT

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Primary localized cutaneous nodular amyloidosis (PLCNA) is a rare form of primary localized cutaneous amyloidosis that presents as yellowish or reddish waxy nodules on the extremities, face, trunk or genitalia. It is characterized by amyloid deposits in the dermis that are produced by local plasma cells. Histologic findings are indistinguishable from those of primary systemic amyloidosis. A 75-year-old man presented to our ENT department with solitary tumor located on the right nostril. Complete excision was made and the material was referred for pathologic examination. The tumor was 1 cm in diameter, grey reddish on the cutting surface. Microscopic examination revealed deposits of eosinophilic amorphous material in the dermis. Mild infiltrate of plasma cells (CD138 positive) could be seen in the amorphous material and next to small blood vessels in the dermis. The amorphous material stained positively with Congo red and demonstrated green birefringence with polarizing microscopy. The immunohistochemical imaging revealed the cytoplasm of infiltrating plasma cells to stain with both anti-kappa and anti-lambda chains. Additional extensive clinical and laboratory workup revealed no systemic involvement. The patient's medical history revealed no diseases and previous or current medical treatments. The patient was treated surgically. The diagnosis of PLCNA was made in February 2011, and no further information on this case can be presented. In conclusion, immunohistochemical analysis revealed polyclonality of the infiltrating plasma cells, which is generally a less common characteristic of primary localized cutaneous amyloidosis. However, extensive clinical and laboratory workup showed no systemic involvement of amyloidosis nor revealed any other acute or chronic disease that could result in secondary amyloidosis. This is an even rarer case of PLCNA with plasma cell polyclonality.

## EX VIVO DEVELOPMENT OF SKIN IN THE RAT LIMB BUD

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The aim of this investigation was to explore the *ex vivo* developmental potential of rat limb buds to develop skin in a serum-supplemented organ culture system. Fisher rat fore- and hind-limb buds were microsurgically removed under a dissecting microscope from 13- and 14-day-old embryos and placed on a lens paper supported by a stainless steel grid, where they spent three days or two weeks at the air-liquid interface. Eagle's Minimum Essential Medium was supplemented with 50% rat serum and changed every other day. Samples were processed by routine histology, embedded in paraffin, and uninterrupted serial sections were stained by HE, Masson trichrome or Azan stain. In isolated limb bud, immature epithelium covering its surface was present. During the 3-day culture period, stratified epithelium developed. In limb buds that spent two weeks in culture, keratinization of the stratified epithelium and fully developed stratum granulosum could be discerned in some explants. It is concluded that limb bud organ-culture provides an appropriate model to follow skin development *ex vivo*, which might be of interest for investigation of pharmacological compounds in skin development.