

REVIEW ARTICLES

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Could human amniotic membrane be a source for acupoint thread embedding therapy?

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Abstract

Background: Peripheral neuropathy usually leads to a major cause of motor disability, but the functional restoration after treatment continues to show modest results. Acupoint thread-embedding therapy is a subtype of acupuncture treatment in which biodegradable threads are inserted into skin, subcutaneous tissue or muscles at specific points for long stimulation. Different biodegradable materials have been developed and widely used. Human amniotic membrane is rich in collagen, extracellular matrix proteins and growth factors. The avascular, low immunogenic, anti-inflammatory, anti-bacterial, anti-fibrotic and non-tumorigenic properties of amniotic membrane make it valuable in medical applications and its use has no ethical problems. Elasticity, stiffness and other biomechanical properties also make it possible to use the amniotic membrane for various medical purposes. AM is almost always considered as discarded substance, it satisfies most of the criteria of an ideal biological tissue and shows almost zero rejection phenomenon.

Conclusions: The human amniotic membrane, the cellular compounds and extracellular matrix have a lot of benefic proprieties that are or could be used in treatment of many human diseases. Its biological and biomechanical properties are promising in the manufacture and use of filaments in acupoint thread embedding therapy.

Key words: peripheral neuropathy, acupoint thread embedding therapy, amniotic membrane.

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