

Note: In this research study Dr. Manzanares was able to determine that the areas of the foot referred to as *deposits* in reflexology have an organic composition as opposed to previous theory of inorganic matter, calcification crystals or toxins.

Biopsies of Foot Deposits Reveal Organic Composition and Mechanism of Action for Reflexology by Dr. Jesus Manzanares, M.D.

Depts. of Neurology, Rheumatology, Traumatology,
Cardiology and Internal Medicine in University Hospital Vail D'Hebron,
Hospital Sagrado Corazon from Barcelona, Spain.
Biography below

Purpose: To study biopsies of deposits taken from human foot tissue; to determine anatomical characteristics and tissue composition of the deposits to understand the relation to pathologic conditions in the body and demonstrate the role of the nervous system in reflexology. *Deposits* can be located throughout the feet in *reflex areas* that correspond to specific organs, glands and body parts

Method: To understand exactly what a deposit is, bi-lateral biopsies were performed on tissue from the feet of three (3) adult patients. This task was a difficult one over a period of years from **1989 through 2002**, finding patients willing to undergo biopsies without personal benefit and for the advancement of reflexology research.

Biopsies were done on non-deposit tissue and biopsy from reflex areas with deposits and associated with: (1) the stomach reflex area of a patient with gastro duodenal ulcer; (2) the L5-S1 reflex area of a patient with a disk hernia; (3) the thymus reflex area of a patient with asthma.

Results: There is not one characteristic structure that represents a reflex area that contains a deposit but rather it is a mixture of different tissues. A fundamental difference exists between non-deposit biopsy and subcutaneous cellular tissue in an area where deposits do exist. The proportion of nervous fibers in a deposit compared to the low number in the non-deposit biopsy were shown to be:

Proportionate variances between tissue with deposits and non-deposit biopsies

Non-Deposit Tissue	Deposit Tissue
8% nervous fibers	42% nervous fibers
27% vascular elements	28% vascular elements
65% connective tissue	30% connective tissue

Conclusion: This anatomical-pathological study reveals the neuro biochemical character of reflexology.

Deposits are formed by a net of hypodermic connective tissue with abundant neurovascular elements. The presence of abundant nervous fibers in tissue with existent deposits supports the relationship between reflexology and the body's neurological system. **The mechanism of action** of reflexology has a neuro biochemical basis.

Deposits are located in the hypodermis (subcutaneous cellular tissue), where existent receptors (Pacini and Golgi) are extremely sensitive to pressure. Deposits reflect the imbalance (anatomical or functional) of the organ or body part represented in the corresponding reflex area in the foot.

Physical characteristics of deposits depend on the organ imbalance, the zone of the foot where that organ is reflected and the pathology phase. Deposits are palpable for size, consistency and sensitivity.