

**22. Authors:** Fortuna D, Rossi G, Zati A, Cardillo I, Bilotta TW, Pinna S, Venturini A, Masotti L

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**Title:** "Nd:YAG laser in experimentally induced chronic degenerative osteoarthritis in heavyline chicken broiler - pilot study."

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**Place:**

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**Purpose:** to assess the efficacy of HILT Therapy in osteoarthritis.

**Discussion:** The most significant fact emerged from this study is the ability of the power laser (HILT) to antagonize the degenerative rocesses and to give a weak neochondrogenesis respons.

**Methods:** degenerative arthritis was induced in 18chickens by intra-articular inoculation of Freund's adjuvant. Clinical studies were carried out(weight increase and grades of lameness) as well as histological tests and seroassay (C Reactive Protein). Statistical analysis was performed by student's paired t-test.

**Results:** the control group showed severe ankylosing arthropathy, fissuration of the articular cartilage, chronic synovitis, marked deviation of the joints, abundant phlogistic infiltrate. The treated group showed circumscription of the chronic osteoarthritic process, preserved articular surface, increase in the synovial fluid, absence of necrotic fragments or phlogistic infiltrate.

**Conclusion:** HILT is safe in the treatment of articular pathologies and does not induce lesions. HILT is able of antagonizing induced arthritis by anti-inflammatory effect.