

## A Multidisciplinary Approach to Hip Osteoarthritis

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**Introduction:** The treatment principles of hip osteoarthritis (OA) historically included pharmacological and surgical options banishing physical and occupational therapy to a lesser important role. The objective of this study was to develop a multidisciplinary management protocol of hip OA patients with functional limitations.

**Material and Methods:** The purposed protocol is indicated for patients affected by hip osteoarthritis with a Kellgren-Lawrence radiographic grade between one and three, pain and stiffness of the joint, restricted locomotion activities and reduced quality of life. This study included thirty patients (10 males and 20 females) with an average age of 54.7 years (min. 29, max 77). All patients were evaluated at baseline by one orthopaedic surgeon fellowship trained in Sports Medicine or Adult Reconstruction and secondarily treated by one Physical Therapist (PT), by an Occupational Therapist (OT) and by a Chiropractor. The orthopaedic surgeon diagnosed hip OA, examined the joint status, evaluated the state of the disease, promoted patients education and eventually weight loss programs and performed a fluoroscopically controlled intra-articular hip injection with Hyaluronic Acid (Jointex, 16 mg/2 ml Chiesi). The PT elaborated and explained to the patients a three-times a week Hip Arthritis Home Exercise (HAHE) protocol including hydrotherapy and aerobic, strengthening, and range of motion exercises. The OT's function was to improve the patients ability to perform activities of daily living and to teach them the principles of energy conservation and joint protection thru a once a week half an hour class. The chiropractor..... Patients were assessed by an independent physiotherapist at 1 wk, 4 wks, 12 wks and 6 months according to the WOMAC questionnaire by Prof. N. Bellamy, which evaluates pain (A), stiffness (B) and functional limitation (C) on a series of five 10 cm VAS.

**Results:** All patients were evaluated at baseline, 1 week, 4 weeks, 12 weeks, and 6 months from the first visit and hip injection with Hyaluronic acid performed by the orthopaedic surgeon. The baseline average WOMAC score was 84 points (min. 79, max 87).

Follow-up at 1 week:

Follow-up at 4 weeks:

Follow-up at 12 weeks:

Follow-up at 6 months:

**Conclusion:** The authors of the current multidisciplinary protocol believe that the treatment of mid-to-moderate hip osteoarthritis is a combination of non-NSAIDS pharmacological (Hyaluronic Acid) and non-pharmacological modalities. Physical and occupational therapy play a key role in the management of the dysfunctional hip and should become part of the daily routine for those patients.

Rossi Enrico, nato a Livorno 1969, coxalgia destra postraumatica, asc e IA: eta' 29, Womac preop 79, finale 25

Pinzani Marcella, nata a Firenze 21.04.1949, displasia congenita anca destra, IA, eta' 59, womac preop 91, finale 47

Freudiani Marta, nata a Sesto F.no 1930, coxartrosi iniziale anca sinistra, IA, eta' 77, womac preop 85, finale 32

Del Gamba Iacopo, Firenze 1955, coxartrosi destra, IA, eta' 53, womac preop 84, finale 31

Peppoli Gianluigi, Tavarnuzze 1959, cox sin, eta' 49, womac preop 81, finale 46

Montici Cristina, Chiesina Uzzanese, cox destra, 1952, eta 56, womac preop 85, finale 51

Rosano Anna, Gaiole 1954, cox destra, womac preop 82, womac finale 46

Martinuzzi Elisa, Scandicci 1946, cox destra, womac preop 85, womac finale 43

Pontini Luca, coxalgia destra, 1951, womac preop 81, womac finale 36

Pagliuca Gabriella, coxartrosi destra, Prato 1954, womac preop 87, womac finale 44

ETA MEDIA 54.7

WOMAC PRETREAT 84

WOMAC FINAL 40.1