

COMPLEX STATUS IN AN OLD FEMALE PATIENT WITH CEMENT BIPOLAR ENDOPROSTHESIS HIP'S ARTHROPLASTY FOR OSTEOPOROTIC FRACTURE ASSOCIATED WITH OMOLATERAL SCIATIC NERVE SEVERE PARESIS AND LOWER LIMBS CHRONIC VENOUS INSUFFICIENCY COMPLICATED WITH DEEP VEIN THROMBOSIS AND RESPECTIVELY, BILATERAL FLU BRONCHOPNEUMONIA – CASE REPORT

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Abstract

Background: Osteoporosis is a generalized skeletal disease caused by the significant loss of bone mineral density (BMD) and micro architectural bone deterioration. When women reach menopause, "the rate of bone loss increases to about 2% to 3% per year" and dramatically leads to fragility and progressive increase in the risk of fracture. In that order, the osteoporotic hip fracture has "a profound impact on the physical health and psychosocial wellbeing of patients", 50% of cases lost the ability to walk and 25% require home care. Associated co-morbidities in elderly patients with osteoporosis complications always occur to be a diagnostic and therapeutic challenge.

Materials and Method: We present the case of female patient, 77 years old, who was hospitalized to The Teaching Emergency Hospital "Bagdasar- Arseni", Bucharest (hospital's Bioethics commission approval No: 9181 per April 11.2018) – The Neuromuscular Rehabilitation Clinical Division and also to The Emergency Hospital of Ilfov County, Bucharest – The Medical Rehabilitation Physical Medicine and Balneology Clinical Division in successive admissions between January and April in 2018. She suffered a cement bipolar endoprosthesis left hip arthroplasty in November last year, for osteoporosis hip fracture and left foot *varrus equin* with subsequent severe left sciatic nerve paresis (with incomplete known cause) and lower limbs chronic venous insufficiency with severe skin damages – stage C5 after Clinical Etiologic Anatomic Pathophysiological (CEAP) classification of chronic venous disease. The patient also had multiple comorbidities: high blood pressure, chronic atrial fibrillation, bilateral knee osteoarthritis, secondary right shoulder osteoarthritis consequently to ancient road accident (associated with shoulder, brain and abdominal contusions). The patient was clinically evaluated using general clinical examination, joint and muscle testing and the following outcomes scores/scales: Functional Independence Measure (FIM) motor, modified Rankin scale, Lequesne score for osteoarthritis of the hip, Questionnaire of quality of life (QOL). She was paraclinically evaluated: X-rays as standard radiography, CT-scan, measurement of BMD with DXA-test; because of skin damages, it was not possible to perform the electro-diagnosis of left sciatic nerve. The patient received specific drug therapies and a complex panel of kinesio and orthotic - therapies. During first admission, the patient had a deep vein thrombosis (DVT) episode for which she received heparin - therapy and subsequent NOACs-drugs and also flu and bilateral Broncho-pneumonia treated at Clinical Hospital "DR. Victor Babes".

Results: Despite these complications, the general status of the elderly patient and associated co-morbidities, there was a progressive increase in the outcome functional scores/scales. The patient performs walking on short distances with left leg's inflatable orthosis and therapist's support.

Discutions: The **particularity of this case** is the complex panel of co-morbidities and possible complications on geriatric patient, some of them vital that can act antagonistically with rehabilitation therapy of hip's arthroplasty status.

Conclusions: Rehabilitation therapy may increase the functional outcomes scores and improve quality of life to elderly patients with joint's diseases in addition to achieve a good management of complications and co-morbidities.

Key Words: Hip arthroplasty, Osteoporosis, Deep vein thrombosis (DVT), Sciatic nerve paresis, rehabilitation therapy, elderly patient