

How to merge Orthogeriatrics Units with Fracture Coordination Units (FCU). Experience in the Joan XXIII Health Complex of Tarragona

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Sopena-Bert E¹, San Segundo-Mozo RM², Castro-Oreiro S³

¹ Geriatrics Unit. Francolí Social and Health Hospital. Tarragona (Spain)

² Physical Medicine and Rehabilitation Unit. Joan XXIII University Hospital. Tarragona (Spain)

³ Rheumatology Unit. Joan XXIII University Hospital. Tarragona (Spain)

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To the Editor:

Current scientific evidence and practical clinical guidelines recommend primary and secondary prevention of fragility fractures in geriatric patients^{1,2}. A personal history of fragility fractures significantly increases the risk of new fractures. Up to 33% of patients with a femur fracture had suffered a previous fracture. Among the various fractures due to fragility, the femur is the most prevalent and presents the most repercussions (clinical, functional and social) in patients over 65 years of age, with the resulting depletion of health resources³. The worldwide trend is estimated to rise from 1.7 million femoral fractures in 1990 to 6 million in 2050⁴.

In 2011, the Fractures Working Group of the Scientific Advisory Committee of the International Osteoporosis Foundation stressed the importance of coordination between orthopedics, osteoporosis services, fall units, patient, family, geriatrician and Primary Care physician. This multidisciplinary action was consolidated in the so-called "coordinated services for the treatment of fractures" or Fracture Liaison Services (FLS) that were initially implemented in the United Kingdom, Europe, Australia, Canada and the USA⁵, with very good results.

In 2017, we designed our own FLS unit which, for the moment, is focused on patients from orthogeriatrics (over 65 years with femoral fracture and/or pelvic branches). The FLS is made up of all the health professionals who will intervene throughout the acute hospitalization process, recovery process and subsequent follow-up (rehabilitation doctor, geriatrician, rheumatologist, traumatologist, maxillofacial, nurse, physiotherapist and occupational therapist).

All patients over 65 years of age who have suffered a fracture of the femur or pelvic branches are assessed by the ortho-geriatrics unit (excluding periprosthetic or metastatic). On the fifth day of admission to the traumatology unit they are transferred to hospital, where they

will complete the rehabilitation and convalescence process. The rheumatologist indicates the pharmacological treatment for the secondary prevention of osteoporosis, after a maxillofacial evaluation. All our FLS patients are treated with calcium and vitamin D supplements, depending on the analytical values determined at admission (urea, creatinine, calcium, phosphate, 25-OH cholecalciferol, PTH and total proteins) and the comorbidities, such as renal failure. If the Barthel ADL prior to the fracture was greater than or equal to 60 and there was no severe cognitive impairment (GDS scale equal to or less than 3), the study was extended with a spine x-ray and a rheumatology inter-consultation.

During 2018, a total of 200 patients were assessed; 161 had a fractured femur and 39 of pelvic branches. 77% were women; mean age 85 years in both sexes with a range in women aged 65 to 103 and in men aged 69 to 96. Women were the majority (74%) in the subgroup of patients older than 90 years (representing 24% of the total) which was noteworthy. In all, 28% of the patients had a Barthel prior to the fracture was <60 and had no cognitive impairment, or if so, it was with a GDS <3. All patients had a specific pharmacological treatment for osteoporosis. The main reasons for exclusion from drug treatment were previous dementia (41%) and functional limitation (34%). Of the total of 200 patients who were assessed at the unit, only 15 had a previous diagnosis of osteoporosis and underwent or had undergone specific treatment.

In conclusion, we want to highlight that it is essential to ensure that the different assistances, primary, hospital and socio-health care, are coordinated to address the patient with fragility fracture, although it is very complex to properly bring together the different care levels. There are different FLS modalities and each health region can design it according to the needs and peculiarities of each territory.



Correspondence: Eugenia Sopena Bert (essopena.gipss@gencat.cat)

Bibliography

1. Cancio JM, Vela E, Santaeugènia S, Clèries M, Inzitari M, Ruiz D. Influence of demographic and clinical characteristics on elderly patients with a hip fracture on mortality: A retrospective total cohort study in North-East Spain. *Bone*. 2018;117:123-9.
2. Berry SD, Kiel DP, Colón-Emeric C. Hip fractures in older adults in 2019. *JAMA*. 2019;321(22):2231-2.
3. Monte Secades R, Rabuñal Rey R, Teresa Rigueiro Veloso M, Casariego Vales E. La intervención geriátrica puede mejorar el curso clínico de los ancianos frágiles con fractura de cadera. *Med Clin (Barc)*. 2001;116(17):678.
4. Cosman F, de Beur SJ, LeBoff MS, Lewiecki EM, Tanner B, Randall S, et al. National Osteoporosis Foundation. Clinician's guide to prevention and treatment of osteoporosis. *Osteoporos Int*. 2014;25(109):2359-81.
5. Akesson K, Marsh D, Mitchell PJ, McLellan AR, Stenmark J, Pierroz DD, et al. Capture the fracture; a best practice framework and global campaign to break the fragility fracture cycle. *Osteoporos Int*. 2013;24:2135-52.