

Treatment adherence: a difficult, but not impossible, challenge

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The main aim of the treatment of a patient with osteoporosis is to avoid the appearance of osteoporotic fractures and, in the case in which it has already occurred, to avoid a new one. To achieve this is it important that in each specific case the risk of fracture is evaluated at the time and, as a function of its degree, low, medium or high, set out the preventative and therapeutic strategies necessary to reduce the risk of fracture in this specific person^{1,2,3}. One of the great challenges that still arises in daily clinical practice is to improve the adherence of patients to the various recommendations and treatments counselled by the health professionals. In 2003 the World Health Organisation defined "adherence" as the degree to which the conduct of the patient, in relation to the taking of medicine, the following of a diet or the modification of lifestyle, corresponds with the recommendations made by the health professional. This approach emphasises both the active participation of the patient and the responsibility of the health professional to create a climate of dialogue which facilitates shared decision-making, and contrasts with the concept of "compliance", used as a synonym to adherence, which expresses the degree to which the patient follows the recommendations of the prescriber, and which implies that the patient has a passive role in their treatment, limited to taking the medicine as and when it has been prescribed to them. On the other hand, the term "non-compliance" blames the patient for their failure to follow medical instruction. The degree of adherence to pharmacological treatments for osteoporosis can vary between 40% and 80%; in general, it can be said that one out of every two patients is following their treatment a year after initiating it. The data for non-pharmacological recommendations are no better. The patients who have better levels of adherence and compliance have better final results, both in terms of an improvement in bone mineral density, lower rate of fracture and lower mortality, as well as in lower costs to the health system⁴.

Therapeutic adherence is a complex process which is influenced by many interrelated factors, among which are factors related to the patients (age, social problems, work, economic issues, level of education and training, beliefs, motivation,...), the disease (presence of absence of symptoms, depression, anxiety, personality disorders, memory loss, seriousness of the process, associated diseases, other treatments,...), the drug (dosage regime, complex treatments, high cost, secondary effects, non-acceptance of treatment, medium- to long-term effects, indefinite duration of treatment,...) the environment (existence of family problems, barriers to access,...) and the doctor (poor doctor-patient relationship, low patient satisfaction and/or low confidence in their doctor, feeling of not being listened to, feeling that they are not understood, changes due to generics,...). In the study by M. Sosa Henríquez and the Canarian working group on osteoporosis published in this number⁵ the degree of therapeutic compliance for osteoporosis was assessed in a population of women affected by the disease, with or without fragility fractures, treated by family doctors in a primary care setting. This study apparently suggests that patients with fracture take their treatment with greater adherence than those without, with rates of 75.9% versus 66.1%. The benefits in the prevention of new fractures in compliant patients, as compared with those who are not, has been evidenced in the literature. In a study by Caro et al. (2004) the compliant patients experienced 16% fewer fractures⁶. The reasons which may account for this greater adherence to treatment which Sosa Henríquez et al. found in their study could be in relation to aspects of the patients' psychology and lifestyle, such as a greater awareness of the disease after having suffered a fracture, fear of suffering a new fracture, having a desire to recover their health, family support, etc., and possibly a greater involvement of the health professionals caring for them, by intensifying the treatment interventions for patients at high risk of fracture, given a pre-

vious history of fracture. Understanding the psychological determinants which improve therapeutic adherence, which are related to the aspects of the patients themselves, such as motivation, beliefs, self-caring behaviours, etc, are an interesting field of study which should be explored more in the future.

Another finding of this study was that a significant proportion of the patients (75%) received calcium and vitamin D supplements, observing that in women with treated fractures the percentage is greater than in those without fractures, 84.1% as opposed to 68.4% ($p < 0.001$). One can contrast this high degree of adherence with other studies carried out in other Spanish populations. In a study carried out in health centres in Zaragoza only 29.3% of the population studied diagnosed with osteoporosis correctly followed treatment with calcium and vitamin D, with an appropriate frequency of withdrawal of prescriptions, and with almost half (42% of cases) not taking the treatment despite having an adequate prescription⁷. In the study by Carbonell Abella et al. carried out in primary care health centres in the 17 autonomous communities of Spain only 52% received calcium and vitamin D supplements⁸. In spite of the fact that calcium and vitamin D supplements reduce the incidence of non-vertebral and hip fractures in women with an insufficient intake of calcium and vitamin D, these patients frequently abandon them (secondary effects, poor tolerance, flavour, etc.). But is it possible to improve therapeutic adherence of patients with osteoporosis in normal practice? Given that therapeutic adherence is a complex problem, it requires demonstrably effective interventions, useful and feasible, taking a multidisciplinary approach in which professionals such as nurses and pharmacists can play a significant role in the interventions to be applied. Although different interventions aimed at improving adherence have been described, it is not possible to recommend a specific one which will serve in all cases, and it is possible that a combination of various interventions will be required (telephone calls, reminders, close monitoring, supervised self-monitoring, family therapy, psychological therapy, etc.)^{9,10}.

An always essential first step is to assess the presence of possible predictive factors for subsequent non-adherence, such as insufficient understanding by the patient of the disease, lack of confidence in the benefits of the treatment, cognitive deterioration, concomitant psychological disorders, multiple coinciding treatments, complicated treatments, possible adverse effects, lack of a monitoring plan, poor doctor-patient relationship, difficulties in accessing treatment or cost of treatment.

Interventions for the improvement of adherence should be discussed with the patient, taking into consideration their individual problems and needs.

Recommendations to be taken into account are¹²:

- If a patient has a lack of adherence, investigate if it is intentional or not.

- Analyse the beliefs and worries of the patient regarding their medication.

- Carry out interventions aimed at specific problems: suggest to patients that they keep a record of taking their medicine, simplify the dosage regime, use pill boxes or similar, etc.

- If adverse effects occur, talk to the patients about the benefits and adverse effects, the long term effects of the medication, the patient's preferences when managing the adverse effects, considering an adjustment to the dose, a change to another medicine or other strategies.

- Ask the patient if the cost of the medication poses a problem for them and consider options to reduce it.

It may also be worth using tools which allow an assessment at the start of the prescription of the probability of the treatment being followed in the medium to long term. Recently, a questionnaire has been developed specifically to evaluate adherence to osteoporotic menopausal medication in daily practice, called ADEOS -12. The questionnaire provides an adherence index which goes from 0 to 22. Values ≥ 20 are associated with a high probability of persistence, and an index of ≤ 16 , a high probability of interruption of treatment in the following 9 months. However, it requires adaptation to, and validation for, our country¹¹.

Finally, health professionals should be aware of a new paradigm in relation to the management of chronic diseases, osteoporosis among them, which is to consider the central and significant role which the patient and their environment (family, community) have as co-participants responsible for the management of their disease. The active, informed patient participating in taking therapeutic decisions is a good ally in reaching an optimum level of adherence, to achieve the desired health outcomes.

Declaration of conflicts: The authors declare that there are no conflicts of interest.

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