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## The role of depression and anxiety in pain perception

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### Abstract

**Background:** Depression and anxiety are associated with increased perception of pain severity. Because patients with a depressive disorder and anxiety often report pain, their sensitivity to experimental pain is controversial, probably due to differences in sensory testing methods and the lack of normal values.

**Material and methods:** The study was conducted on 140 selected subjects. The pain test was performed using a technique, called the submaximal effort tourniquet technique. Before the start of the study, a set of psychometric inventories and tests was prepared (visual analog scale, Beck Depression Inventory, Spielberger's State and Trait Anxiety Inventory).

**Results:** No differences in pain perception have been found in men and women as well as in relation to age, thus gender and age cannot be a predictor in pain perception. The anxiety has no effect on pain perception. The depression can be considered a predictor of pain intensity because a change in depression levels determines a change in pain intensity perception at the 3<sup>rd</sup> minute. If the depression category was changed from a patient with no depression to one with mild depression, pain intensity at minute 3 increased by approximately one point on the visual analog scale ( $B=.954$ ,  $CI95\% .200, 1.709$ ,  $p=.014$ ).

**Conclusions:** Depression can be considered a predictor in the evolution of pain perception. Not so much the depression score, but the increase in the severity of depression can predict the evolution of pain perception.

**Key words:** anxiety, depression, pain, visual analog scale, pain test.

### Cite this article

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