

Standard of Care for Stress Fractures

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The first clinical description a stress fracture was registered by Breithaupt, a German military surgeon, in 1855. Widely studied in human beings, overuse training and stress fracture had been described in submitted animals. In 1897, the first radiographic aspect of a stress fracture in the military army is reported. Nowadays in the literature there is a doubt which is the best synonym: "stress fracture" or "fatigue fracture"

The predisponent factors for a stress fracture are related to the biomechanical and enviroment aspects, as for example, the age, gender, race, physical conditioning, endocrinologic and diet disturbance and biomechanic characteristics. The repetitive microtraumas associated to the extrinsic factors and the acute overload, taking to the muscular fatigue may lead to a stress fracture. These are the more accepted phisiopathological mechanisms.

The stress fracture represents 10% of all sports injuries, mainly in running athletes. The patient with a stress fracture presents insidions and gradually pain limitation during sports activities. Usually radiological diagnosis methods of imaging are: x-ray, bone scan, CT and MRI.

The treatment of the stress fracture varies despite of their characteristics. Initially the treatment is clinical, with use of non steroid antiinflamatory, physiotherapy and correction of the biomechanic factors. The weight bearing is allowed just for daily activities. The option for surgical treatment occur when there is failure of the clinical treatment.