

FRACTURE NONUNION

What is fracture nonunion? A fracture which occurs and the normal healing process is interrupted. The fracture may not heal. The lack of healing of a fracture is called a nonunion. This determination can be made within four to nine months after a fracture has occurred.

What is the cause of a fracture nonunion? The vast majority of patients who experience a fracture nonunion do not have a specific cause for that condition. Those patients who are predisposed to a nonunion are the ones that experience an infection at the fracture site, have multiple fracture fragments at the fracture site, experience damage to the blood supply to the fracture at the time of injury, have poor circulation in the extremity prior to the fracture, have bone loss at the time of the fracture or have instability of the fracture fragments during treatment.

What are the treatments for a fracture nonunion? This is a difficult problem and bone graft surgery may be required. Some bone may be taken from another skeletal site and brought to the nonunion fracture to bridge the ununited gap and stimulate bone healing. Additionally, synthetic bone may be used as an adjunct to the patient's own bone graft to stimulate healing. A bone growth stimulator may be used before or after surgery to stimulate the bone cells to proceed along the path of healing. These bone growth stimulators are noninvasive and these are devices that can be applied after surgery at the site of the nonunion to enhance the success of the surgical