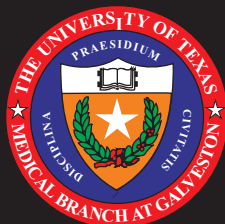


THE SCAPHOID (NAVICULAR) FRACTURE OF THE WRIST IN CHILDREN

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INTRODUCTION

Scaphoid (navicular) fractures are not as common in children as in adults and when they occur **they tend to occur in older children (1)**. The clinical findings are typical in that there is **acute tenderness in the anatomic snuff box**. Unfortunately this part of the wrist examination frequently is not accomplished and then, **detection of the fracture rests with the imager**. In adults transverse, impacted, and comminuted fractures are common but buckle fractures are not. **In children, however, buckle fractures are common and for this reason it was decided to review our material to determine the incidence of these fractures**. The detection of these fractures, often very subtle, **requires the use of comparative views because some normal navicular (scaphoid) bones can appear buckled. It is only when both sides are compared that it becomes apparent that a fracture is, or is not, present. In addition, study of the soft tissues is very important**, primarily for the detection of: (1) whether the soft tissue swelling, on lateral view, is present distal to the radial epiphyseal-metaphyseal junction, and (2) whether the navicular fat pad is obliterated (3-5). In terms of soft tissue swelling on lateral view, if a scaphoid fracture is present, soft tissue thickening will be more pronounced distal to the radial epiphyseal-metaphyseal junction. If the fracture occurs in the radius, swelling will be more pronounced proximal to this level. The navicular fat pad is not as useful because it is not as commonly visualized in children as in adults. Therefore it is probably more useful to rely on simple, juxta scaphoid bone soft tissue thickening.

The purpose of this presentation is to emphasize the buckle-plastic bending fracture of the scaphoid (navicular) bone in children and then to present findings that enable one to detect the injury.