

## **Reducing Cast Saw Injuries in Children: A Novel Technique to Remove Plaster Ponseti Clubfoot Casts (The Univalve) <u5:p></u5:p>**

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Serial Ponseti-style plaster of Paris casts are considered the preferred treatment option for clubfoot in infants. In conjunction with cast application, weekly cast removal is a necessary aspect of treatment, predisposing patients to cast saw injuries. Extensive research and education have been devoted to eliminating iatrogenic cast saw injuries. Despite provider education efforts, the incidence of cast saw burns or abrasions is 1% to 2%. Although alternatives, such as soaking the cast off or using thick protective strips under the plaster, are available, these lead to interruptions in clinic workflow and failure to successfully mold the clubfoot, respectively. This video presents a technique for successful and safe removal of a Ponseti-style plaster of Paris cast by perforating only the convex side of the cast with the cast saw. On the concave side of the cast, a mere superficial partial-thickness score is made 2 to 3 mm deep in the plaster, as well as across the front of the knee and the back of the ankle. With the single convex side full-thickness plaster cut, a large cast spreader is used to broadly open the univalved cast. The proposed technique may result in a substantial reduction in cast saw injuries.