

## Woodcast Is Ecologically Sound and Tolerated by Majority of Patients

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**Abstract :** Background: NHS England has set itself the task of delivering a “Net Zero” National Health service by 2040. It is incumbent upon all health care practitioners to work towards this goal. Orthopaedic surgeons are no exception. Distal radial fractures are the most common fractures sustained by the adult population. However, studies are shortcoming on individual patient experience. The aim of this study was to assess the patient’s satisfaction and outcomes with woodcast used in the conservative management of distal radius fractures. Methods: For all patients managed with woodcast in our unit, we undertook a structured questionnaire that included the Patient Rated Wrist Evaluation (PRWE) score, The EQ-5D-5L score, and the pain numerical score at the time of injury and six weeks after. Results: 30 patients were initially managed with woodcast. 80% of patients tolerated woodcast for the full duration of their treatment. Of these, 20% didn’t tolerate woodcast and had their casts removed within 48 hours. Of the remaining, 79.1% were satisfied about woodcast comfort, 66% were very satisfied about woodcast weight, 70% were satisfied with temperature and sweatiness, 62.5% were very satisfied about the smell/odour, and 75% were satisfied about the level of support woodcast provided. During their treatment, 83.3% of patients rated their pain as five or less. Conclusion: For those who completed their treatment in woodcast, none required any further intervention or utilised the open appointment because of ongoing wrist problems. In conclusion, when woodcast is tolerated, patients’ satisfaction and outcome levels were good. However, we acknowledged 20% of patients in our series were not able to tolerate woodcast. Therefore, we suggest a comparison between the widely used synthetic plaster of Paris casting and woodcast to come in order.

**Keywords :** distal radius fractures, ecological cast, sustainability, woodcast

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