

Suitability and effectiveness of ART approach in patients with disability

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Objectives: The present study aimed to compare Atraumatic Restorative Treatment (ART) (hand instrumentation and placement of glass ionomer cement) with conventional restorative treatment (CRT) (rotary instrumentation and placement of composite resin) in terms of feasibility, acceptability, effectiveness and respondent satisfaction in a population of patients referred for special care restorative dentistry. **Methods:** 66 patients (13.6 ±7.81 years) were included and, after receiving objective information regarding the two treatment options, patients/parents/caregivers selected one. Reasons for the selection and, eventually, for the need for changing the treatment selected, as well as difficulties for carrying out the restorative procedures were recorded. Survival of restorations was followed up after 6 and 12 months. Level of satisfaction with the treatment provided was scored by respondents after 12 months using a visual analogue scale (VAS). **Results:** CRT was chosen by 15 respondents but only proved feasible for 5 (33%). 43 respondents chose the ART approach and proved feasible for 47 patients, with optimal placement of restorations for 79% of all patients receiving ART. Neither ART nor CRT could be performed at the chair for 14 patients who received CRT under general anaesthesia (21%). In all, 298 carious lesions were restored, 182 with ART and 116 with CRT (of which 95 were restored under GA). No significant difference was found in the survival of restorations at 12 months between CRT (91%) and ART restorations (98%). Level of satisfaction reported by the respondents was highest in the group that had selected, and subsequently received, ART (mean VAS score 9.3) and lowest in those selecting, and receiving CRT in the chair (mean VAS score 7.4) **Conclusions:** The results of the present study show that ART is a feasible, acceptable and effective approach to restorative treatment in patients with disability, many of whom have difficulty coping with conventional treatment.