unable to locate the source of pain, they were excluded from the study. A modified visual analogue scale (VAS) was employed for assessment and statistical comparison of pain scores: score 0, absolutely nothing; scores 1–3 (mild), very weak discomfort or mild pain but requiring no intervention and not influencing ordinary activities of daily life; does not require analgesics; scores 4–6 (moderate), moderate pain which is distracting for the patient and occasionally negatively influences the patient from performing his normal daily activities; the pain is relieved with analgesics; scores 7–10 (severe), this score range covered very severe and extremely severe/unbearable pain that forced the patient to give up his/her daily activities and needed rest. This pain is not relieved by analgesics.

RESULTS

The mean age of the patients included in this study was 31 ± 2 years. The number of patients excluded from the analysis because of sealer extrusion was five. Fourteen patients were lost to follow-up, and hence, the total number of patients included in the analyses was 605 (311 males and 294 females, i.e., 51.4 and 49.6%, respectively).

The mean baseline pretreatment pain in the RECIPROC group and One Shape group were 8.9 ± 1.82 and 8.3 ± 1.65, respectively, with no significant differences (P > 0.05).

There was significant difference in the incidence of postoperative pain between the two groups (P = 0.001). The number of patients who had no pain in the RECIPROC and One Shape group were 507 and 462, respectively. However, for patients who had pain (98 in the RECIPROC group and 143 in the One Shape group), the intensity showed significant difference, with patients in the One Shape group (40.5 % of the patients having pain) reporting more values of “severe” pain on the VAS scale compared to the RECIPROC group (P = 0.001). The same 40.5% patients (58 out of 143 patients) also reported having taken analgesics, and this was significantly higher than the percentage of patients in the RECIPROC group (19 out of 98 patients; 19.3%) (P = 0.001).

The percentage of patients having mild, moderate, and severe pain in the RECIPROC group was 71.4, 19.3, and 9.18%, respectively, whereas the intensity of pain in the One Shape group was 22.3% mild, 37.1% moderate, and 40.5 % severe. There was significant difference in the number of patients who had mild (P < 0.001), moderate (P < 0.002), and severe (P < 0.001) pain between the two groups. Disregarding the severity of pain, the mean duration of pain in the RECIPROC and One Shape group was 1.37 ± 0.85 and 1.61 ± 1.23 days, and hence, there was no significant difference between the two groups in duration of pain (P = 0.074). However, when duration was related to the severity of pain, there was no significant difference in the duration of postoperative pain between the two groups when the pain was mild (P = 0.301), but One Shape showed significantly longer duration of moderate (P = 0.001) and severe pain (P = 0.002). Of the 98 patients, only 6 patients reported severe pain longer than two days in the RECIPROC group.

CONCLUSION

The authors concluded that the use of RECIPROC instrumentation system showed significantly less intensity and longer duration of moderate and severe posttreatment pain compared with the single-file rotary system (One Shape) in patients with symptomatic irreversible pulpitis with apical periodontitis.

IMPLIcATIOns FOR PRAcTIcE

This was a clinical trial with a huge sample size which implies that the result reported is not due to chance but to real differences in the interventions tested. The trial results suggest that RECIPROCation produces less postoperative pain than the single-file rotary system used in this trial.

Reference


ERRATUM

The Editor regrets that an error occurred in the CPD Section in the November 2015 issue. Question Five required ONE answer but there were in fact TWO correct answers.

The CPD Accreditors have been advised on the problem and will accept either or both answers.

Details:
5. Identify the incorrect statement.

Procedural sedation is:
  a. An alternative to GA
  b. Involves advanced techniques in administering combinations of drugs
  c. Drug induced depression of consciousness Patient still responds to verbal commands
  d. May be administered by nurses
  e. Requires active intervention to maintain the airway

Procedural sedation may NOT be administered by a nurse, nor is intervention required to maintain the airway.

Apologies to all CPD enthusiasts!