and secretion. Induction of RANKL by PGE2 was attenuated by EP4 inhibitor and siRNA. Interestingly, in the presence of EP4 inhibitor, PGE2 decreased the expression of OPG suggesting the role of EP4 in RANKL/OPG homeostasis.

Conclusion: The results demonstrate the role of EP4 in RANKL/OPG regulation in HPDL cells. This suggests EP4 as a therapeutic target for the treatment of periodontal disease.

ID 011
ID: 154137

PASSIVE ULTRASONIC IRRIGATION VERSUS SYRINGE IRRIGATION FOR DENTAL DEBRIS REMOVAL
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Introduction: Irrigation has a key role in successful root canal treatment.

Objectives: To test the effectiveness of dental debris removal in root canals by comparing a Passive Ultrasonic Irrigation (PUI) with a Syringe Irrigation (SI) approach.

Methods: Thirty straight single rooted extracted teeth were divided into two comparable groups. Canals were shaped with K-files (sizes 20-40) and cleaned with 3% sodium hypochlorite (NaOCl) using SI each time the file was changed. A new size 45 K-file was then used to create the apical box and smooth the more coronal walls. For the SI group, the canal was finally irrigated with 10ml of NaOCl from a syringe; for the PUI group, the canal was finally irrigated with NaOCl and PUI for 20 seconds three times. The amount of remaining dental debris in each part of each root canal was evaluated using a 4-grade scoring index under 40x magnification (0=canal empty; 1=less than half canal filled with debris; 2=more than half canal filled with debris; 3=complete canal filled with dental debris).

Results: The overall mean debris scores for SI and PUI were 1.4 (±0.36) and 0.8 (±0.44) respectively (p=0.0006). There were no significant differences between the SI and PUI groups when comparing the debris scores of the most coronal parts (P=0.05). However, the PUI canals were significantly cleaner than the SI canals in the more apical parts. Within the SI group, the root canals were significantly cleaner in the more coronal parts compared with the apical parts, but vice versa for the PUI group.

Conclusion: PUI appears to be more effective at cleaning canals (especially in the apical area) compared with the standard SI technique.

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DISEASE AND TREATMENT IMPACTS ON ORAL CANCER PATIENTS’ HEALTH-RELATED QoL
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Objectives: To assess the impact of oral cancer and related treatment modalities on patients’ health-related quality of life.

Methods: A longitudinal study of a cohort of newly diagnosed adult oral cancer patients followed over a period of three months. HRQOL data was collected for each patient upon diagnosis (baseline), one month after commencing treatment (first follow-up) and after three months (second follow-up) using a Malay-translated FACT-H&N (v 4.0), a global question, and a supplementary set of eight questions (maq; obtained after cross-cultural adaptation of the instrument). The FACT-H&N (v 4.0) is a 39-item head-and-neck-cancer-specific instrument which assesses patients’ physical (7 items), social (7 items), emotional (6 items), functional (7 items) well-being and head/neck concerns (12 items). Paired t-tests were used to test the statistical significance of score changes.