

تتقدم عمادة كلية طب الاسنان بالتهنئة للأبحاث العلمية التي شاركت في مؤتمر الـ
PER/IADR الذي انعقد في فنلندا في الفترة الواقعة بين 12-15\9\2012 :

بحث: Intensity of dental light curing units used in Damascus city

من اعداد : د. محمد الغضبان ، د. مرام حاج حسين، د. الان عبد الرحيم

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429 Intensity of Dental Light Curing Units Used in Damascus City

Friday, September 14, 2012: Noon - 1 p.m.

Location: Poster Hall (Finlandia Hall)

Presentation Type: Poster Session

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Objectives: the aim of this survey study was to evaluate light intensity of light curing units (LCUs) used in Damascus city and the effect of light curing tip cleaning on this intensity. **Methods:** 217 light curing units in 202 dental clinics (selected randomly) were evaluated for: light intensity before and after light curing tips (LCTs) cleaning (immersing in ethanol 70% for 10 minutes), status of LCTs (fractured and non fractured), curing modes and eye protection way used. DigiRate LM 100 digital radiometer (Monitex, Taiwan) was used in this study. **Results:** 44.8% of Quartz Tungsten Halogen (QTH) LCUs, and 89.3% of Light Emitting Diodes (LED) LCUs were accepted (intensity $\geq 400\text{mwcm}^2$), T-test revealed significant difference ($P < 0.05$) between QTH LCUs intensity ($402.36 \pm 186.40\text{mwcm}^2$), and LED LCUs intensity ($709.70 \pm 261.79\text{mwcm}^2$). 73.3% of LCTs tested were unclean with composite build ups, and the light curing intensity before tip cleaning ($573.73 \pm 277.06\text{mwcm}^2$) was increased after cleaning ($604.02 \pm 281.65\text{mwcm}^2$), ($P < 0.05$). 23.0% of the tested LCUs had fractured tips with lower intensity ($535.66 \pm 342.31\text{mwcm}^2$) compared with non fractured tips ($624.49 \pm 258.46\text{mwcm}^2$), ($P < 0.05$). Standard curing mode was more used (82.5%) than Soft-start and Pulse curing modes. 75.1% of the dentists were not using any eye protection method and 95.4% of the tested LCUs were not intensity evaluated before, although they were used for curing dental composite routinely. **Conclusions:** 1- 69.6% of the tested LCUs (QTH and LED) were accepted, most of it was LED. 2- LCUs with unclean and fracture curing tip produced lower intensity values. 3- Simple curing tip cleaning increased the intensity dramatically. 4- there is unawareness of the importance of eye protection during light curing, and light curing intensity assessment before use of the light curing unite.

Keywords: Curing lights and Light Intensity

See more of: [Dental Materials: Restorative Composites and GIC's-material Properties](#)

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بحث: New five minerals oxides pulp capping material compared with Dycal

من اعداد : د. محمد توفيق كوكي

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271 New Five Minerals Oxides Pulp Capping Material Compared with Dycal

Thursday, September 13, 2012: 1:30 p.m. - 3:30 p.m.

Location: Aurora Hall (Finlandia Hall)

Presentation Type: Poster Discussion Session

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New modified MTA material (SMO) which consists of five mineral oxides was developed by Dr. Maysour Ala Rachi (Syrian Patent number: 5770). **Objectives:** the aim of this in-vivo study was to compare clinical and radiographic success rate between SMO and calcium hydroxide (Dycal, Dentsply, Germany) as direct pulp capping material. **Methods:** 22 vital asymptomatic upper and lower premolars and molars (closed apex) with deep caries in 16 patients (9-30 years) were treated with direct pulp capping (exposure less than 2mm). After bleeding control, the pulp was capped directly with SMO and Dycal randomly, and then restored with amalgam over RMGIC (Vitrebond 3MESPE, USA) base. Vital pulp tests and radiographic assessments after one week, one month, and 6 months were done to decide the persisting vitality of the teeth and absence of any radiological evidence of failure. **Results:** statically, after 6 months no difference were found between SMO (91.7%) and Dycal (60%) in success rate, ($P=0.078>0.05$). Regardless of the direct pulp capping material used, the average age of the succeeded cases (21.7years) was less than the failed cases (28.4years) ($P<0.05$). success rate in direct pulp capping according to teeth type (molars or premolars) was 81.8% and 72.7% respectively with no differences, ($P>0.05$). **Conclusions:**1- SMO showed higher success rate compared with Dycal with no statistical differences, 2- Direct pulp capping was more succeeded in younger patients. 3- There is no effect of tooth type on direct pulp capping success rate.

Keywords: Endodontics and Pulp Capping

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