



Title Parting Laser Perforator

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http://medicaldev.moh.gov.my/uploads/tr_2009/parting%20laser.pdf

Aim

To assess the safety, effectiveness, and cost effectiveness of Biomed Parting Laser Perforator.

Conclusions and results

Limited evidence indicated that Biomed Parting Laser Perforator, Model: TZD-CX-100Y and other brands of laser skin perforators are safe. Limited evidence indicated an insignificant difference between laser skin perforators and stainless steel lancet as regards pain, convenience, and methods of preference.

No evidence was retrievable on the effectiveness of Biomed Parting Laser Perforator, Model: TZD –CX-100Y for collection of capillary blood samples. However, as regards other laser skin perforators, limited evidence showed that they are as effective as a stainless steel lancet for obtaining capillary blood in patients with diabetes. From the retrievable evidence, the results showed no significant difference between capillary blood obtained for glucose and hematocrit testing using the two methods. However, estimates of the potassium level in capillary blood obtained using laser skin perforator were not reliable. No evidence was retrievable on the cost effectiveness of Biomed Parting Laser Perforator, Model: TZD –CX-100Y or other brands of laser skin perforators.

Recommendations

Based on the review, more clinical research is warranted for this technology. Laser skin perforators do not seem to be superior compared to the conventional lancet in obtaining capillary blood. Hence, they cannot be recommended for routine use.

Methods

Electronic databases, including PubMed, MEDLINE from 1950 to 2009 (week 4), EBM Reviews–Cochrane Central Register of Controlled Trials, EBM Review–Cochrane database of systematic reviews, HTA Databases, Horizon Scanning database (EuroScan,

Australia and New Zealand Horizon Scanning), FDA website, MHRA, and Google, were searched for published reports. Relevant articles were critically appraised and evidence graded using US/Canadian Preventive Services Task Force.

Further research/reviews required

More clinical research is warranted.