New Laser Safety Measures in Operating Theatre

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Introduction
HA Laser safety manual provides general guidelines on the safe use of medical lasers in operating theatre. All these safety measures and guidelines are developed to minimize Laser hazards. Optical hazard is the most well-known and concerned one. Wearing protective eyewear is usually necessary and it is wavelength specific. Therefore, the required protective goggles are machine specific. Develop a new specific laser safety measure is required in operating theatre. One such measure is to have additional labeling for quick and accurate identification of appropriate protective eye wear for each laser machine. This method adopted a colour coding system to each laser machines and its related safety applicable accessories.

Objectives
The main function of the colour code is to provide a form of distinction to assist personnel differentiating one laser machine from the others. If wrong or not suitable laser safety measure is used, it can be immediately detected and hence laser accidents can be minimized.

Methodology
A specific colour is assigned to each laser machine and the corresponding laser safety applicable accessories, warning signs and the laser record book are labeled with the same colour.

Result
Our results demonstrated that the eye catching colour coding system can enhance the awareness of colleagues on laser safety, their understanding of the laser machine operating precautions. Thus the risk of operating laser machine is reduced. The application of the colour code system significantly reduced the errors of using wrong protective goggles or wrong laser machine during operations. It could enhance the laser safety of patient and staff. The feedback from the colleagues was positive. It showed that the operations became smoother, and the errors related to using incorrect laser machine or safety applicable accessories were diminished. Moreover, safety awareness of staff on using laser machine was enhanced.
The colour coding system can further be adopted in other operation or machines with related safety applicable accessories.