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[\[PDF \(218K\)\]](#) [\[References\]](#)**Light Intensity Evaluation of Laser-induced Fluorescence after Caries Removal Using an Experimental Caries Staining Agent**[Jun-Ichiro KINOSHITA](#)¹⁾, [Hiroshi SHINOMIYA](#)¹⁾, [Kazuo ITOH](#)¹⁾ and [Koukichi MATSUMOTO](#)¹⁾

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Abstract:

Objective: The purpose of this study was to evaluate the intensity of fluorescent light reflected from cavity wall dentin, after dentin stained by an experimental caries detecting liquid was removed. *Background Data:* The conventional caries detecting liquid tends to penetrate dentin too deeply. On the other hand, DIAGNOdent[®] has gradually gained recognition and established itself as a caries detection device using a laser beam. *Method:* An experimental caries staining liquid or the conventional caries staining liquid was applied in the same cavity to observe for differences in dye penetration. Intensity of fluorescence reflected from treated dentin was measured by DIAGNOdent[®]. *Results:* The mean DIAGNOdent[®] value after removing the tooth substance stained by the experimental liquid was 17.9±4.1, compared with 7.7±2.7 by conventional one. *Conclusion:* Light intensity evaluation of laser-induced fluorescence suggested that the experimental caries detecting liquid did not penetrate the dentin which should be preserved, hence avoiding overtreatment.

Key words:[Experimental caries detector](#), [Sclerotic dentin](#), [DIAGNOdent[®]](#)[\[PDF \(218K\)\]](#) [\[References\]](#)

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