When used for traditional crown preparations, IDS can result in improved bond strength.

IDS enables the pre-polymerization of the dentin bonding resin, which allows the clinician to focus on the "wet bonding" to dentin, while dry enamel bonding can be performed at the stage of restoration luting; the sealed dentin is protected from bacterial leakage/infiltration during the provisional restoration, thus enhancing patient comfort. The potential risk of postcementation sensitivity is also reduced, and the cementation of the definitive restoration requires only limited or no anesthesia, ultimately facilitating occlusal adjustment.

REFERENCES


IAAD WORKING INSTRUCTIONS

There is a strong body of evidence to support applying an adhesive resin coating to the freshly cut dentin according to the manufacturer’s instructions when a significant area of dentin has been exposed during tooth preparation for indirect restorations, such as inlays, onlays, veneers, and even crowns. Freshly cut and clean dentin is ideal for dentin bonding. IDS enables the pre-polymerization of the dentin bonding agent, resulting in improved bond strength. Delaying restoration placement allows the dentin bond to develop without stress during the provisional restoration stage. When used for traditional crown preparations, IDS can result in significantly increased retention, reduced marginal leakage, improved bond strengths, and decreased postoperative sensitivity. Practical reasons to justify IDS include the fact that the clinician can focus on the “wet bonding” to dentin, while dry enamel bonding can be performed at the stage of restoration luting; the sealed dentin is protected from bacterial leakage/infiltration during the provisional restoration, thus enhancing patient comfort. The potential risk of postcementation sensitivity is also reduced, and the cementation of the definitive restoration requires only limited or no anesthesia, ultimately facilitating occlusal adjustment.

REFERENCES