

IMMEDIATE DENTIN SEALING

It was 1st introduced in the early **1990** by **Pashley et al** which involves applying a dentin-bonding agent (DBA) to freshly-cut dentin immediately after tooth preparation and before making an impression

In DDS, the dentin adhesive is applied just before the final restoration



OptiBond FL-
Etchant- 37.5% phosphoric acid
Primer-HEMA,PAMM,
Adhesive-TEG-DMA
Filler type- Barium glass
Filler load- 48%
FL- Fluoride
(4th generation bonding agent)

In IDS, Dentin adhesive applied immediately after tooth preparation and cured

IDS is a procedure which is done on a vital tooth, generally for indirect restoration.

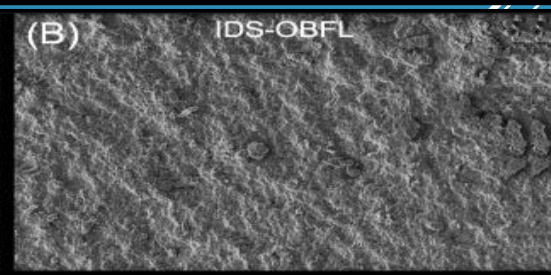
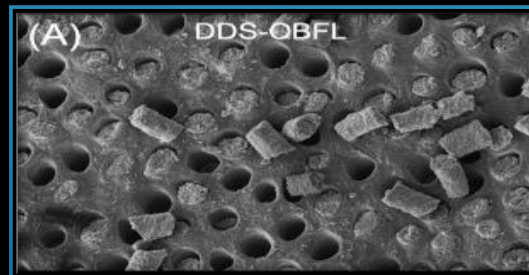
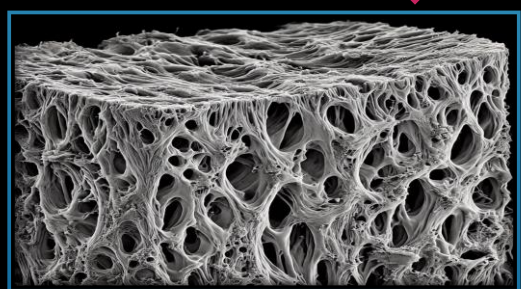
Benefits:-

- ✓ Enhancing the **bond strength**
- ✓ Decreases post operative **sensitivity**
- ✓ Reduces bacterial microleakage

Hence an ideal surface is prepared for bonding the restoration with resin cements



Freshly cut dentin



These are clinical and microscopic results showing better dentinal interfaces after the IDS in comparison to DDS. Studies has shown that **IDS enhances the bond strength** with less degradation with time, as compared to DDS(Delayed Dentin Sealing)