

TIPS FROM OUR READERS

## Straightforward tip for identifying the type of screwdriver needed for screw-retained implant-supported prostheses



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Screw loosening is a common complication of screw-retained implant prostheses.<sup>1,2</sup> If the prosthesis was made in another clinic, it is sometimes challenging for clinicians to know what type of screwdriver to use. Using magnification loops with light to visualize the screw's head, making a radiograph to identify the implant type, or trying various available screwdrivers may help select the needed screwdriver. However, in some situations, such as when nonoriginal screws have been used or there are very deep screw channels, identifying which screwdriver should be used is not possible.

This tip aims to describe a straightforward technique for identifying the screwdriver to use for a screw-retained implant-supported prosthesis. It may also be helpful to

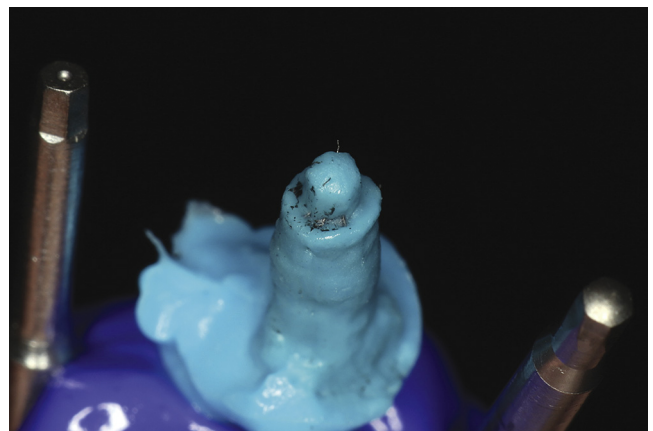
visualize the diameter and length of the screw channel, as some drivers have an upper enlarged component which may prevent insertion of the driver completely into the channel preventing engagement of the driver tip into the screw.

### TECHNIQUE

1. Remove the screw-channel access restoration with rotary instruments. Ensure proper removal of protective material from the screw head, such as cotton pellets or Teflon tape.
2. Apply fast-setting light polyvinyl siloxane (PVS) (Virtual Light Body Fast Set; Ivoclar Vivodent AG)



**Figure 1.** Application of fast-setting light polyvinyl siloxane and retentive bur inside screw-channel of screw-retained implant prosthesis.



**Figure 2.** Shape of screwdriver needed registered at tip of polyvinyl siloxane.

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inside the screw channel with the silicone dispenser and a fine tip. Insert a round tungsten carbide bur into the unpolymerized PVS and wait for complete polymerization (Fig. 1).

3. Remove the bur with the PVS. The shape of the screwdriver needed will be registered at the tip of the PVS. Then, select the appropriate screwdriver (Fig. 2).

## REFERENCES

1. Jung RE, Zembic A, Pjetursson BE, Zwahlen M, Thoma DS. Systematic review of the survival rate and the incidence of biological, technical, and aesthetic

complications of single crowns on implants reported in longitudinal studies with a mean follow-up of 5 years. *Clin Oral Implants Res* 2012;23:2-21.

2. Pjetursson BE, Thoma D, Jung R, Zwahlen M, Zembic A. A systematic review of the survival and complication rates of implant-supported fixed dental prostheses (FDPs) after a mean observation period of at least 5 years. *Clin Oral Implants Res* 2012;23:22-38.

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