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HOW TO MAKE AN IMAGING STENT

Imaging stents are useful tools of communication between the clinician and the oral & maxillofacial radiologist.



1. Ideally, the radiopaque marker(s) in an imaging stent should be both linear and uniformly radiopaque (arrows).
2. The radiopaque marker should be made of either **metal** or **gutta percha**. Barium sulphate is strongly *discouraged* because it may not have an appropriate density or uniformity on the image. Thick gauge metal wire, thin metal tubing or gutta percha are the materials of choice for imaging stents. The radiopaque marker shown in the images above (a-c) is made from thin copper tubes.
3. The shape of the marker should be linear. Metal balls or bee-bees are strongly discouraged because they do not show the axis of potential implant placement.
4. Radiopaque markers should be placed into the imaging stent in the appropriate position(s) determined by the clinician. Ideally, the number and spacing of planned implants should equal the number and spacing of the radiopaque markers.
5. The axis(es) of the marker(s) should approximate the 3-dimensional orientation that the implant is to be placed into the bone at. This only needs to be an approximation. The rationale for specifying the orientation is so that when the patient is imaged, measurements can be made along the axis of the radiopaque marker. If no axis(es) are provided, the measurement axis(es) will be made at the discretion of the oral & maxillofacial radiologist.

