

7. Bedoya MM, Park JH. A review of the diagnosis and management of impacted maxillary canines. *J Am Dent Assoc* 2009;140:1485–1493
8. Boffano P, Bosco GF, Gerbino G. The surgical management of oral and maxillofacial manifestations of Gardner syndrome. *J Oral Maxillofac Surg* 2010;68:2549–2554
9. Boffano P, Gallesio C, Bianchi F, et al. Surgical extraction of deeply horizontally impacted mandibular second and third molars. *J Craniofac Surg* 2010;21:403–406
10. Boffano P, Gallesio C. Kissing molars. *J Craniofac Surg* 2009;20:1269–1270
11. Ruga E, Gallesio C, Chiusa L, et al. Clinical and histologic outcomes of calcium sulfate in the treatment of postextraction sockets. *J Craniofac Surg* 2011;22:494–498

Self-Locking Sliding Knot to Manage Upper Third Molar Extraction

To the Editor: Surgical knots are divided into 2 groups: (1) flat knots and (2) sliding knots. Surgical removal of an impacted tooth in the maxilla leaves a small incision in a deep-seated operating field. Because of the limited access to the oral cavity, intraoral manipulation is often difficult and time-consuming.¹ Although the scientific literature condemns the sliding knot as dangerous and unpredictable, we find it useful and safe to suture the postextractive sockets. It avoids the necessity to put the fingers of the operator into the oral cavity of the patients; it seems particularly useful in specific circumstances such as phobic and infectious patients. In addition, some patients can have a very sensitive gag reflex.^{1,2} It is a pleasure to share our personal technique of self-locking sliding knot applied to dentoalveolar surgery for more than 4 years. We think that this sliding knot is easily reproducible, and it can be successfully applied to other surgical situations in oral and maxillofacial surgery such as endoscopic management of facial fractures and endoscopic facial rejuvenation.

SURGICAL TECHNIQUE

Step 1: The left hand secures the needle away, and the rest of the post strand lies between the palm of the hand and the ring with the fifth fingers. The thumb, the index finger, and the middle finger are free for manipulations. The right hand holds the strand between the thumb and the finger. The right hand passes the strand around the 3 fingers of the left hand (Fig. 1).

Step 2: The wire was passed around the post strand and 3 loops were completed from inferior to superior, from below the ring and the middle fingers of the right hand (Fig. 2).

Step 3: From the loop created in the left hand, the short wire in the right hand is passed and swept by the thumb, the index finger,

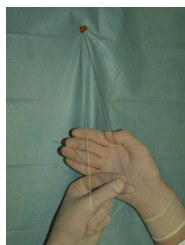


FIGURE 1. Starting position.

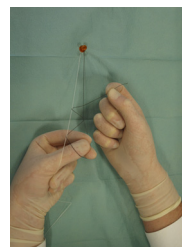


FIGURE 2. Completion of the 3 loops.

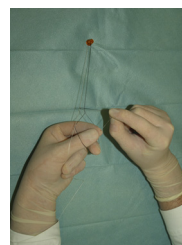


FIGURE 3. Tightening of the knot.



FIGURE 4. Self-sliding knot.

and the middle finger of the left hand, which tightens the knot by pulling the short wire (Fig. 3).

Step 4: At this point, the short wire becomes inactive and the left hand can slide the knot by pulling the post strand (Fig. 4).

Francesco Arcuri, MD
Matteo Brucoli, MD
Matteo Nicolotti, MD
Arnaldo Benech, MD, PhD
University of Piemonte Orientale “Amedeo Avogadro”
Novara, Italy
fraarcuri@libero.it

REFERENCES

1. van Rijssel EJC, Trimbos JB, Booster MH. Mechanical performance of square knots and sliding knots in surgery: a comparative study. *Am J Obstet Gynecol* 1990;162:93–97
2. Thacker JG, Rodeheaver G, Moore JW, et al. Mechanical performance of surgical sutures. *Am J Surg* 1975;130:374–380