

SP : 가

— Abstract —

SP Knot: A New Arthroscopic Sliding Flip Knot With A Lag Bight

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We describe a secure and easy-to-tie knot with a lag bight, the SP knot. An optimal sliding knot is required to be a low-profile, easy to throw, slide well, and provide a good initial security. The SP knot easily slides and sets while avoiding premature locking during sliding. While maintaining tension on the post limb with a knot pusher, pulling the loop limb makes it to flip and distort post limb, resulting in creation of a snug knot on the exact location with desired tension. The SP knot has one knot configuration before pulling the loop limb, but it converts to two knots after pulling the loop limb, one half-hitch and one "clove hitch", which could provide enough loop security before any additional half-hitches. The configuration of the completed SP knot is formed lying along the loop of the knot, rather than stacking up, which enables a very low profile. The SP knot has various characteristics of the optimal arthroscopic slip knot and may be a useful tool for successful arthroscopic surgery.

Key Words: SP knot-Arthroscopic knot-Sliding knot-Flip knot

(knot tying) .
(knot pusher)

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가 (knot pusher) 가
 가 (low-profile), 가 (Fig. 1A).
 SP 가 (lag SP (Fig. 1B). 가 (throw) 가 (bight) (Fig 1C). 가

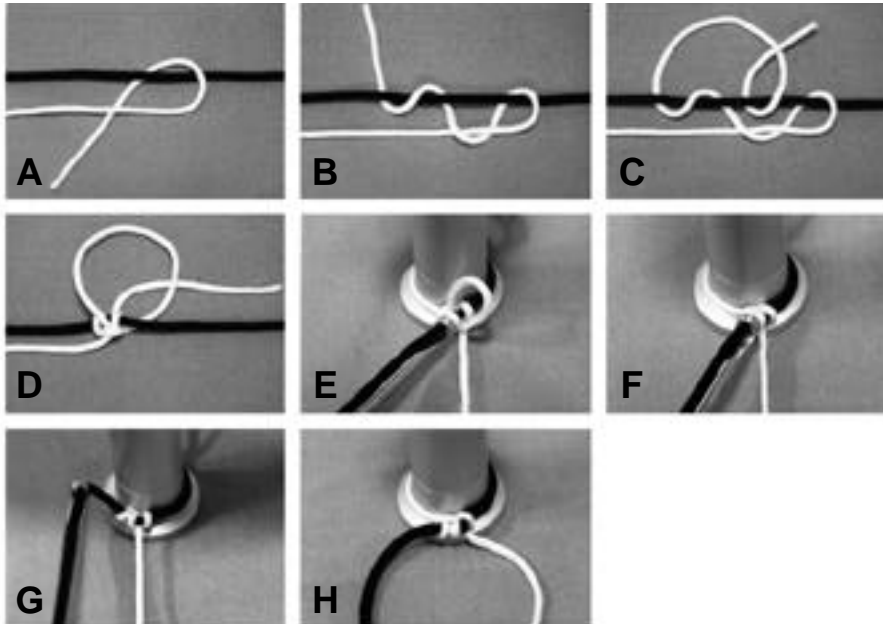


Fig. 1. Tying method of the SP knot. **(A)** Lay the loop limb over the post limb and make a throw under both the post and loop limb. **(B)** Pass the end of the loop limb between the post and loop limb and make an underhand throw under the post limb. **(C)** Bring the end of the loop limb back and make an overhand throw over the post limb. Do not pull the post limb and leave the lag bight. **(D)** Make the knot neat by gently pulling the lag bight. **(E)** Slide the knot down by pulling the post limb and by pushing the knot with a knot pusher. **(F)** Keep tension on the post limb and the knot pusher until a tight loop is established. Then, pull the loop limb to lock the knot. **(G)** Point past the knot with the knot pusher while keeping tension on the post limb and pull the loop limb to lock the knot more securely. **(H)** The completed SP knot has low profile and the post limb is distorted (flipping).

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and knot security)^{1,2)}

가

1-7). Hangman

Duncan
(wrapping turn)가

(Fig 1D).

가 (knot
pusher)

가 가
(knot push-
er)

가 (Fig 1E).

가 (Fig 1F). flip
(knot pusher)

1G). SP knot 가 , 가
(Fig

1H). 가
SP knot 가 .

(reproducibility)

. Duncan
(bulk), (loop

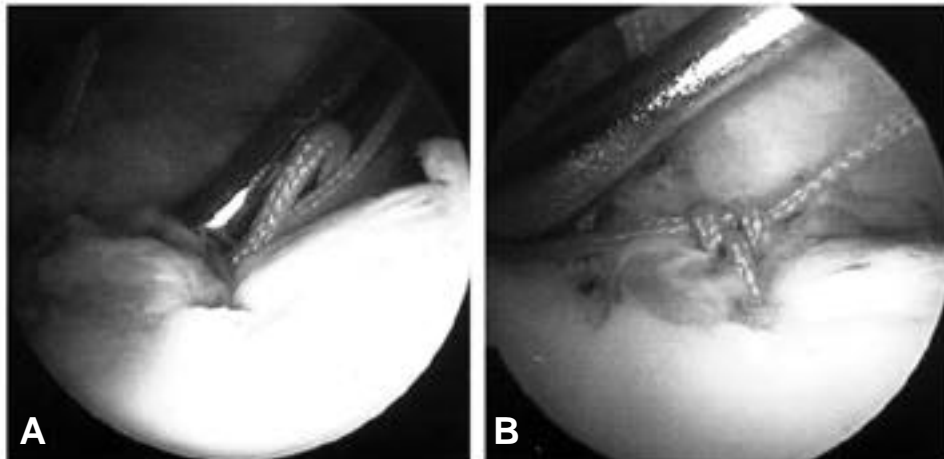


Fig. 2. An arthroscopic view of the SP knot with a lag bight. **(A)** The SP knot is completed in situ by pulling the loop limb. **(B)** An arthroscopic view of the completed SP knot. Note the low profile of the SP knot.

가 , 100 SP
가
가 , (knot pusher)

가 SP
SP knot 가 3,5)

가 (Fig
1H and 2B).

1,7) (loop
security)

가 8) SP
(one-way ratchet)

4,5) , SP
가 1

'clove hitch'

2 SP
Bankart

SP

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