PROCEDURES: TICK REMOVAL

Indications

- 1. Diagnostic
 - o None
- 2. Therapeutic
 - o Removal of tick
 - o Prevention of possible infection¹

Contraindications

- 1. Unfamiliarity with procedure
- 2. Lack of proper tools

Materials

1. Blunt medium tipped angled forceps or special tick removal tool (Sawyer Tick Pliers, ProTick Remedy, Ticked off)²

Step-by-Step^{3,4,5}

- 1. Clean the affected area with povidone-iodine solution
- 2. With either blunt tweezers, tick -removal device, or gloved fingers (if no tools available), grab the tick as close to the surface of the skin as possible & pull perpendicular and upward with steady pressure
- 3. Try not to squeeze, puncture, or crush the tick's body when pulling upward because its fluids could contain infectious properties
- 4. Do not jerk or twist the tick off, as you may break off the mouthparts in the skin
- 5. After the tick is removed, apply antiseptic solution to the wound
- 6. Apply bandage over affected site; remove within 24 hours
- 7. Dispose the tick by putting it into container of alcohol or by flushing it down the toilet
- 8. Do not try to remove any mouth parts of the tick that are still in the skin as skin trauma may occur. The parts will eventually come out on their own.

Pearls

- 1. Do not use bare hands to remove tick
- 2. Do not use hot matches, petroleum jelly, nail polish or other products to kill or remove the tick (it may irritate the tick and cause it to release fluids into the wound)

Complications

- 1. Local or systemic infection from tick body fluids
- 2. Bleeding secondary to procedure
- 3. Irritation of skin if mouthparts are left in

Follow Up

1. Follow up if increased swelling, erythema or pain after 24-48 hours

References

1. Steere, AC. Lyme disease. N Engl J Med 2001; 345:115.

- 2. Stewart RL, Burgdorfer W, Needham GR. Evaluation of three commercial tick removal tools. Wilderness Environ Med. 1998;9:137–42.
- 3. Haynes JH. Tick Removal. In: Pfenninger JL, Fowler GC, eds. Procedures for primary care physicians. St Louis: Mosby, 1994: 125-6
- 4. Gammons, M. Tick Removal. American Family Physician, 2002 Aug 15; 66(4): 643-646.
- 5. Needham, GR. Evaluation of Five Popular Methods

Author: Haemi Choi, MD, Adventist Hinsdale Hospital FMR

Editor: Edward Jackson, MD, Michigan State University-Sparrow Hospital FPRP