



BestBETS for Vets

Supporting veterinary clinicians in making evidence-based decisions



The University of
Nottingham

UNITED KINGDOM · CHINA · MALAYSIA

Comparison between surgical tie techniques for feline castration

Clinical Scenario

You started work at a new practice about 2 months ago. You are rostered on to do surgery that morning and there are a number of cat castrations to carry out. The surgical veterinary nurse working with you that day whom you haven't worked with before asks you how you do your cat castrates and therefore what equipment you need. You have used a forcep tie method since graduating, but ask the nurse what the rest of the team generally do. The nurse tells you that most of the vets in the practice use a hand tie method as they experienced some post-operative complications a few years ago with two cats where a forcep tie method was used. You wonder if there is any evidence relating to the occurrence of post-operative complications for cats undergoing castration where either method is used...

3-Part Question (PICO)

In [cats undergoing castration] does using a [hand tie method versus a forcep tie method for the spermatic cord] result in a [decreased risk of post-operative complications]?

Search Strategy

MEDLINE(R) In-Process & Other Non-Indexed Citations and MEDLINE(R) 1946 to Present using the OVID interface

(cat.mp. OR cats.mp. OR feline.mp. OR felines.mp. OR felis.mp. OR felidae.mp. OR exp Cats/ OR exp Felis/ OR exp Felidae/)

AND

(sterilis\$.mp. OR steriliz\$.mp. OR neuter\$.mp. OR desex\$.mp. OR de sex\$.mp. OR castrat\$.mp. OR orchiect\$.mp. OR orchidect\$.mp. OR gonadect\$.mp. OR exp Castration/ OR exp Orchiectomy/)

AND

(hand-tie.mp. OR hand tie.mp. OR cord tie.mp. OR cord-tie.mp. OR square tie.mp. OR square-tie.mp. OR forcep tie.mp. OR forcep-tie.mp. OR haemostat tie.mp. OR haemostat-tie.mp. OR hemostat tie.mp. OR hemostat tie.mp. OR figure of eight tie.mp. OR figure of 8 tie.mp. OR figure-of-eight tie.mp. OR figure-of-8 tie.mp. OR figure-of-eight-tie.mp. OR figure-of-8-tie.mp. OR square knot.mp. OR square-knot.mp. OR figure

of eight knot.mp. OR figure of 8 knot.mp. OR figure-of-eight knot.mp. OR figure-of-8 knot.mp. OR figure-of-eight-knot.mp. OR figure-of-8-knot.mp. OR instrument tie.mp. OR instrument-tie.mp. OR spermatic cord tie.mp. OR spermatic cord knot.mp.)

CAB Abstracts 1910 to Present using the OVID interface

(cat.mp. OR cats.mp. OR feline.mp. OR felines.mp. OR felis.mp. OR felidae.mp. OR exp cats/ OR exp Felis/ OR exp Felidae/)

AND

(castrat\$.mp. OR sterilis\$.mp. OR steriliz\$.mp. OR neuter\$.mp. OR desex\$.mp. OR de sex\$.mp. OR orchiect\$.mp. OR orchidect\$.mp. OR gonadect\$.mp. OR exp Castration/)

AND

(hand-tie.mp. OR hand tie.mp. OR cord tie.mp. OR cord-tie.mp. OR square tie.mp. OR square-tie.mp. OR forcep tie.mp. OR forcep-tie.mp. OR haemostat tie.mp. OR haemostat-tie.mp. OR hemostat tie.mp. OR hemostat tie.mp. OR figure of eight tie.mp. OR figure of 8 tie.mp. OR figure-of-eight tie.mp. OR figure-of-8 tie.mp. OR figure-of-eight-tie.mp. OR figure-of-8-tie.mp. OR square knot.mp. OR square-knot.mp. OR figure of eight knot.mp. OR figure of 8 knot.mp. OR figure-of-eight knot.mp. OR figure-of-8 knot.mp. OR figure-of-eight-knot.mp. OR figure-of-8-knot.mp. OR instrument tie.mp. OR instrument-tie.mp. OR spermatic cord tie.mp. OR spermatic cord knot.mp.)

Search Outcome

MEDLINE

- 1 papers found in MEDLINE search
- 1 papers excluded as they don't meet the PICO question
- 0 papers excluded as they are in a non-English language
- 0 papers excluded as they are review articles/in vitro research/conference proceedings
- **0 total relevant papers from MEDLINE**

CAB Abstracts

- 2 papers found in CAB search
- 1 papers excluded as they don't meet the PICO question
- 1 papers excluded as they are in a non-English language
- 0 papers excluded as they are review articles/in vitro research/conference proceedings
- **0 total relevant papers from CAB**

Total relevant papers

0 relevant papers from both MEDLINE and CAB Abstracts

Comments

There is a possibility that a paper published in Portuguese by de Oliveira et al. (2010) may answer the PICO question. It is not standard practice for articles to be translated as part of the BestBETs for Vets process due to the rapid nature of these assessments (both an advantage and limitation of this method). During a full systematic review of the evidence, it would be expected that articles of this nature would be translated and fully assessed.

Summary of Evidence

No Summary of Evidence yet.

Comments

There were no easily accessible published articles found directly comparing the approaches of interest in this BET.

Other resources such as textbooks, expert opinion, narrative reviews and online sites can be useful when peer-reviewed evidence is scarce. However, there needs to be an appreciation of the limitations for using these evidence sources in decision-making.

Bottom line

There was no peer-reviewed evidence found using the BestBETS for Vets methodology to determine whether using a hand tie method compared to a forcep tie method for the spermatic cord during feline castration reduces the risk of post-operative complications.

Therefore, the choice of approach should be based on veterinarian preference, discussion of the risks and benefits with the client and individual practice guidelines, if they are available.

Disclaimer

The BETs on this website are a summary of the evidence found on a topic and are not clinical guidelines. It is the responsibility of the individual veterinary surgeon to ensure appropriate decisions are made based on the specific circumstances of patients under their care, taking into account other factors such as local licensing regulations. **Read small print (/disclaimer)**

References

de Oliveira KM, Muzzi LAL, Torres BBJ, Alves EGL, Sampaio GR, Muzzi RAL, (2010). A comparative study among three open orchietomy techniques in cats (English version of title). *Acta Scientiae Veterinariae* 38: 177-183.

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