

Efficient Spay/Neuter Surgical Techniques

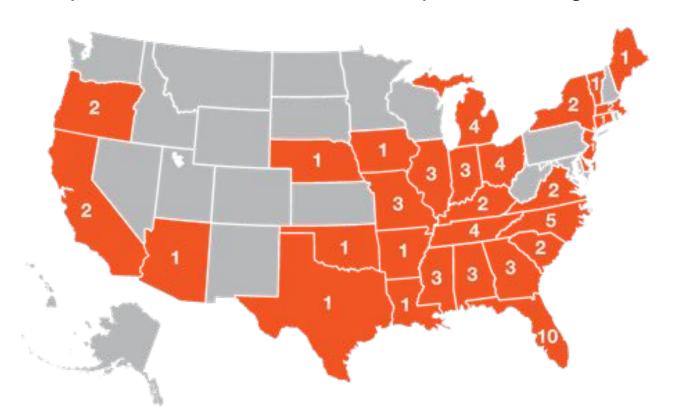
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Updated: 4/26/18

Proven Methods

- 166 clinics trained across the US & Canada
- 1 million+ companion animals are sterilized each year
- 1,328+ private veterinarians have completed training for CE





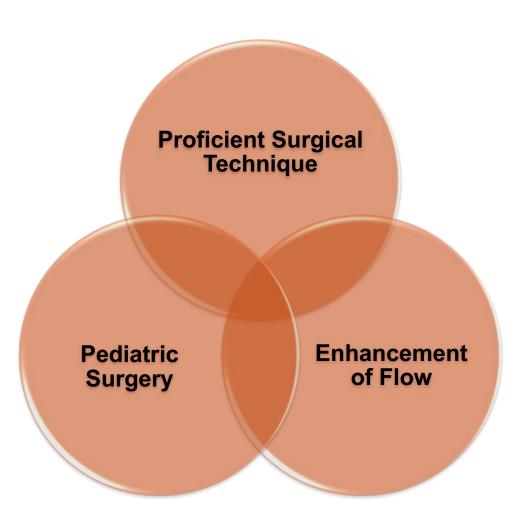
Enabling Local Veterinarians

- You know the need in your region best
- Empower individuals to take action for their own communities
 - Hands-on training in AVL

Obtain CE credit



Improving Efficiency in Spay/Neuter





Pediatric Surgery







Traditionally 6 Months

- Difficulty with this rule of thumb lies in that many cats may have their first heat at 4 months
- Thus waiting until 6 months to spay risks an accidental pregnancy





Advantages to Pediatric Spays

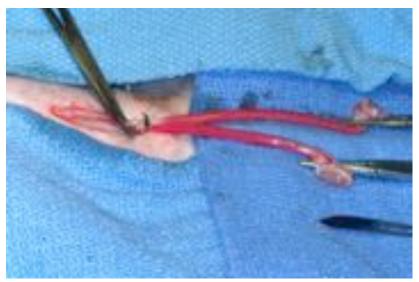
- Faster surgery time
 - Less fat
 - Less bleeding
 - More elastic tissues
 - Excellent visualization
 - Less suturing
- Faster recovery from anesthesia
- Faster healing







Less Stressful for Patient & Surgeon





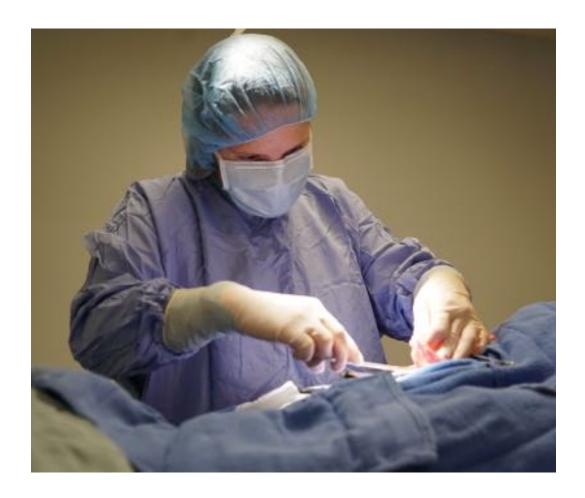
Puppy

In-Heat Adult Dog



Peri-operative Concerns for Pediatric Patients

- Hypoglycemia
- Hypothermia
- Blood loss
- Stress
- Infectious disease





Avoiding Hypoglycemia

- Minimal stores of hepatic glycogen → risk for hypoglycemia
 - Avoid prolonged fasting
 - GI emptying time is very fast in puppies & kittens, so less chance for regurgitation/aspiration
 - Maximum 4 hours fasting (can "pre-Tx")
 - Feed 1-2 tsp 15 mins after standing & small meal within 1-2 hrs
 - Karo syrup for "sugar lips" pre-op & post-op





Avoiding Hypothermia

- Use towels & supplemental heat
 - Hot water blanket
 - Rice bag/sock

Use with caution to avoid thermal burns!!

- Shave hair conservatively
- Avoid excess wetting of coat during prep
- Allow littermates to recover together
- Use shredded paper/towels in recovery cages
- Use of "space blankets"



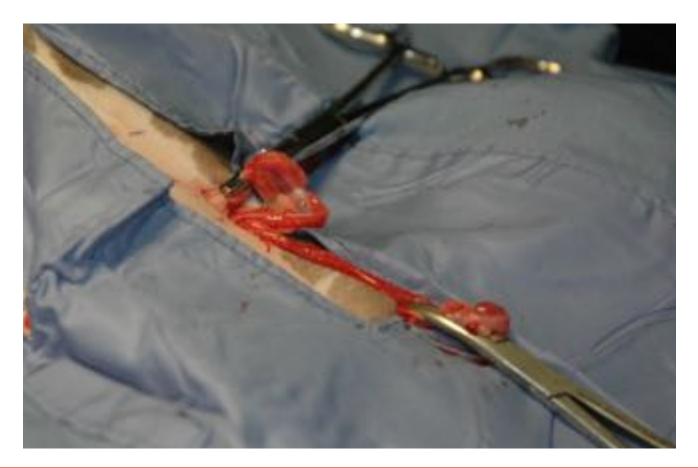






Avoid Blood Loss

- Meticulous tissue handling
- Hemostasis





Avoid Stress

House littermates together







Infectious Disease







Accurate Weight





Puppy & Kitten Spays

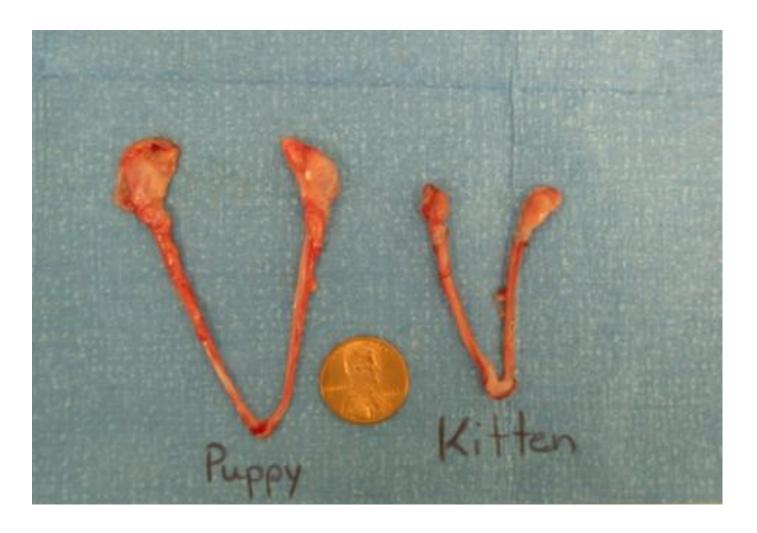
- Ventral midline incision
 - Small (2 cm)
 - Midway between umbilicus & pubis
 - Slightly more cranial for puppies
- Expect abdominal fluid!







Puppy & Kitten Spays





Kitten Neuters

- Scrotal incisions
- Closed technique
- Self ligatures
- No closure





Puppy Neuters

- Scrotal or pre-scrotal incision
- Closed technique
- Self ligatures
- Close with tissue glue



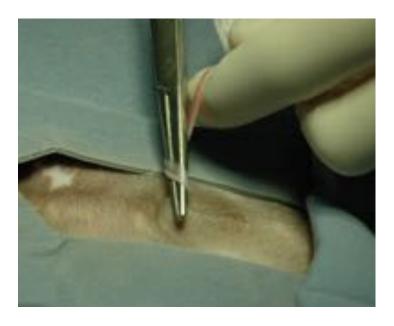


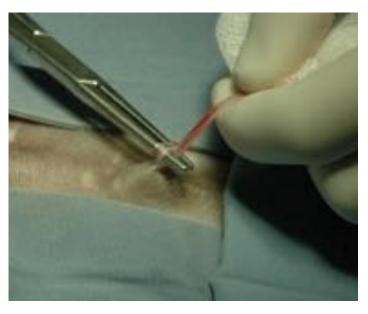




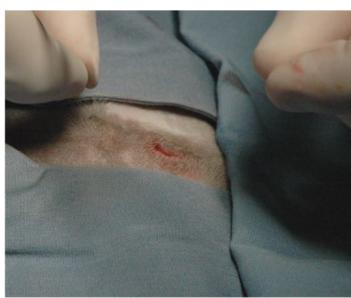




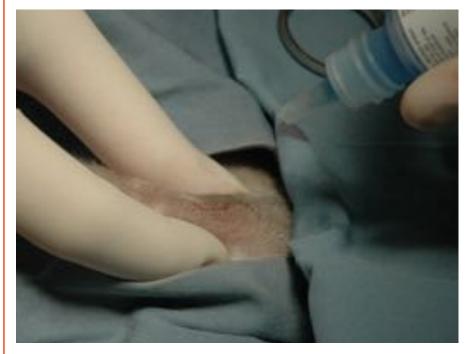
















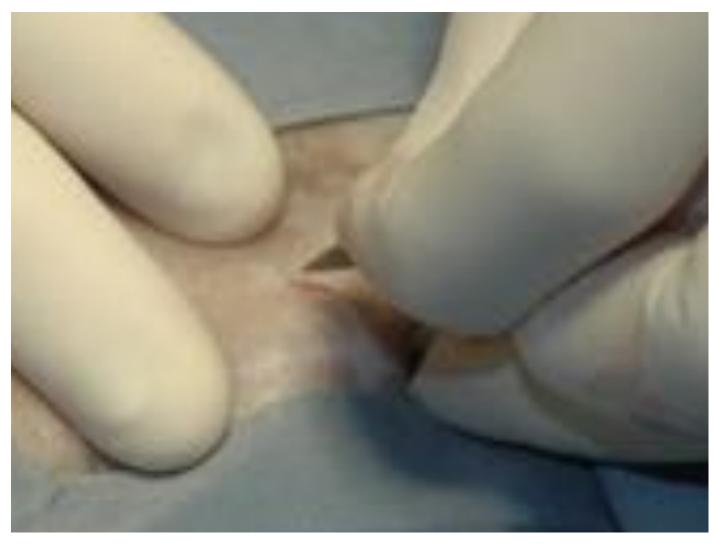
Tattooing





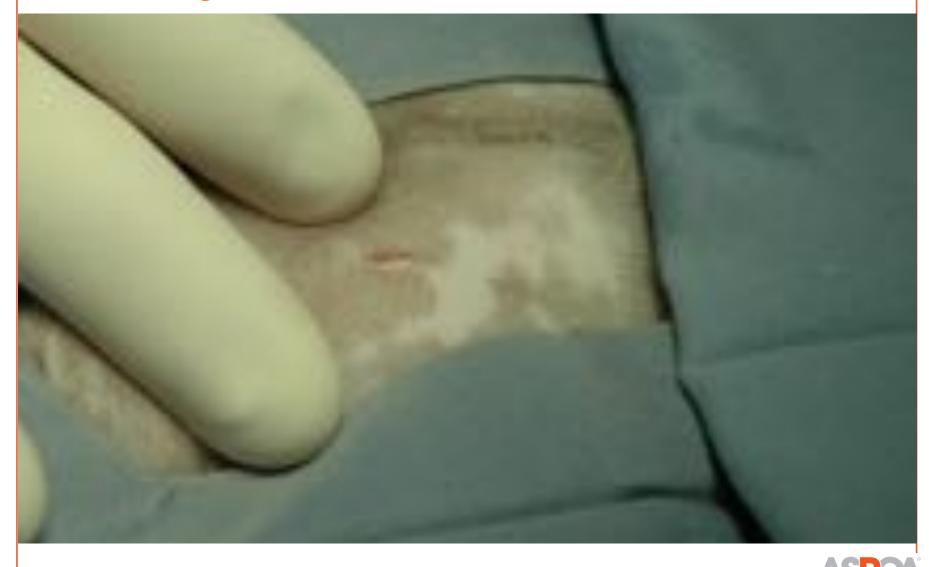


Method of Scoring to Place Tattoo

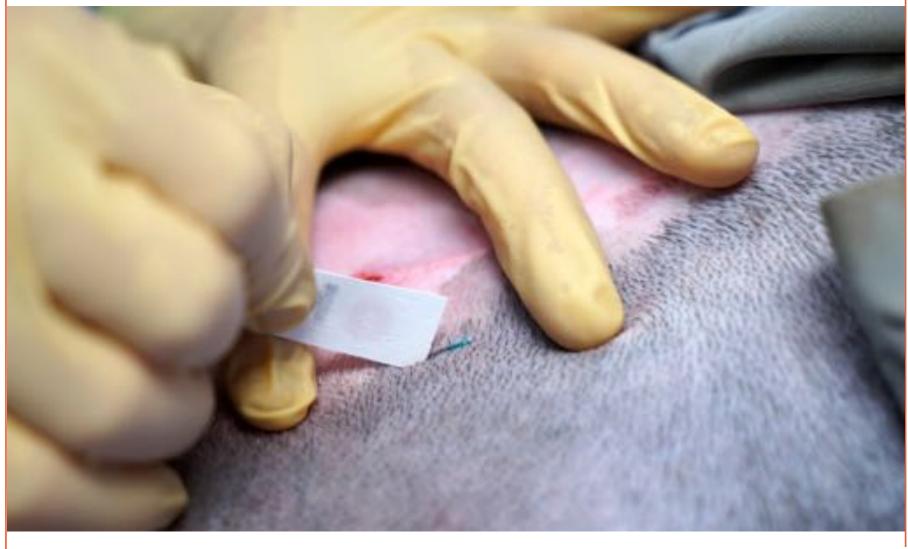




Tattooing



Tattooing



Tattooing: Glue

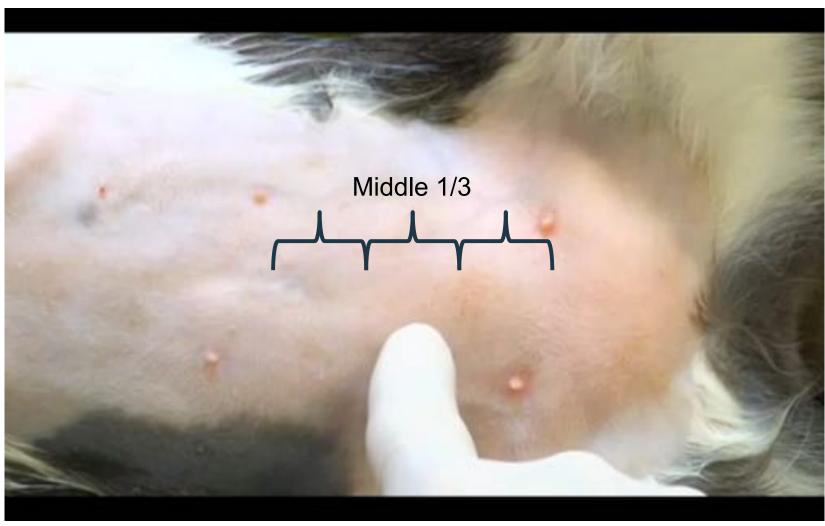


Proficient Surgical Techniques – Female Cat

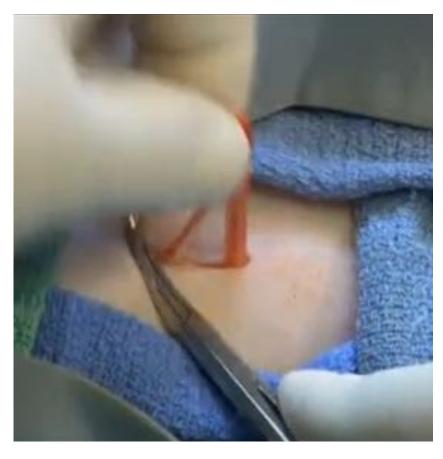




Incision Placement – Cats, Kittens, Puppies













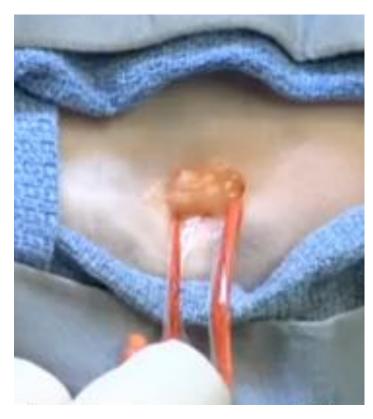








Alternate method



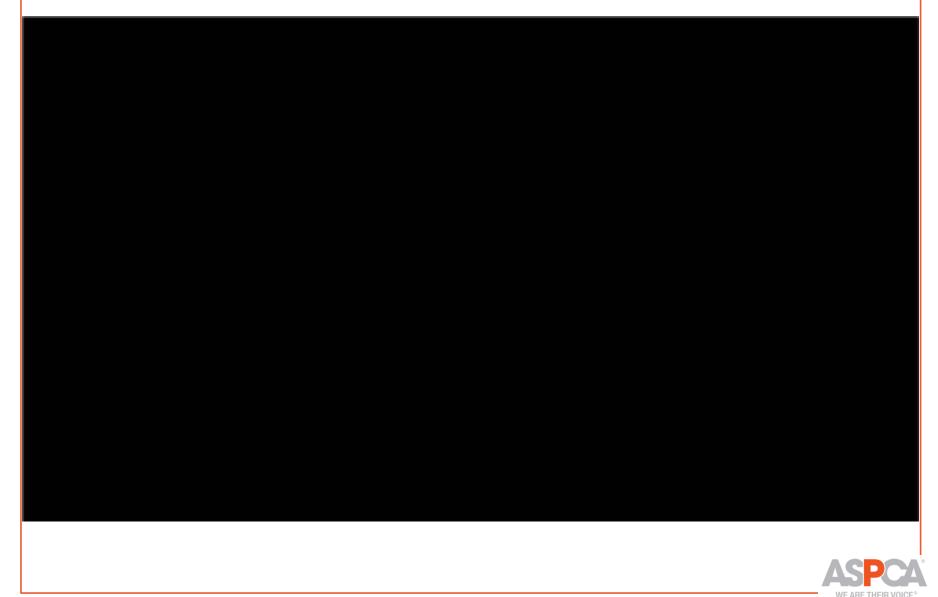








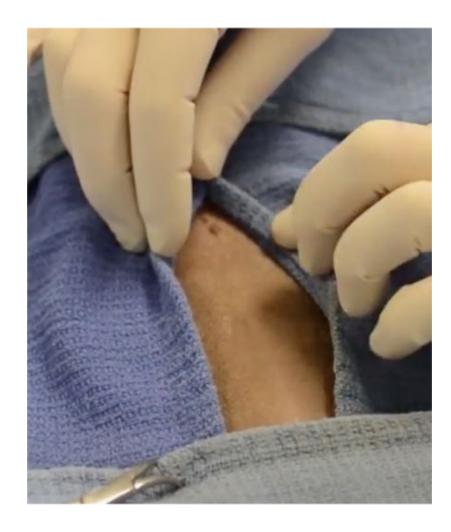
Pedicle Tie: Video



Proficient Surgical Techniques – Female Dog



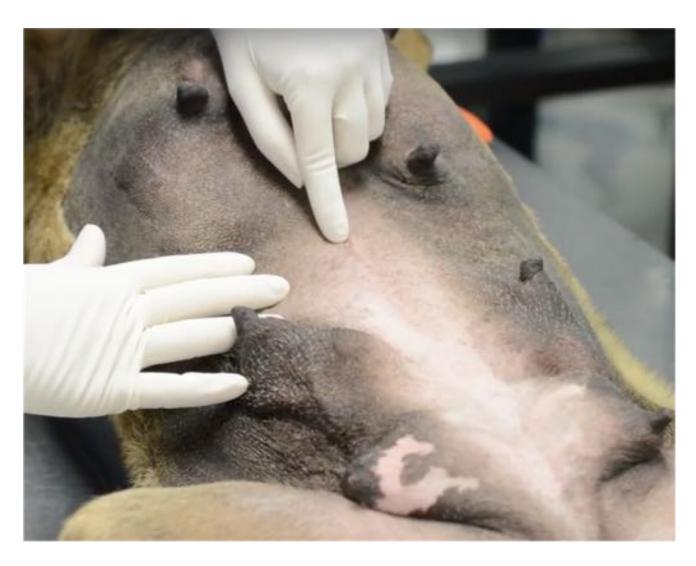
Incision Placement – Young FD (6-18 Mos)





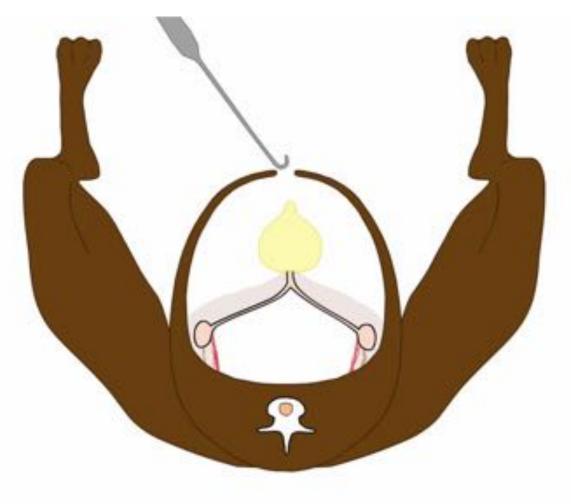


Incision Placement – Mature Adult FD





Spay Hook



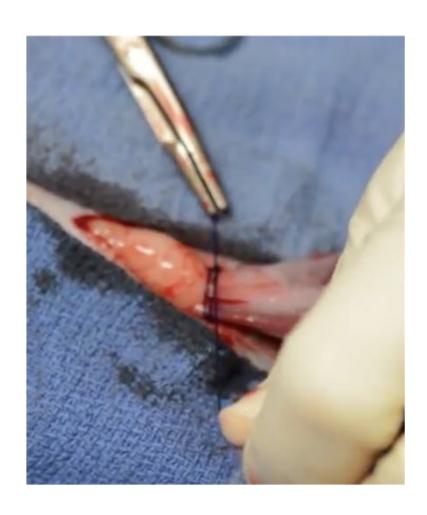


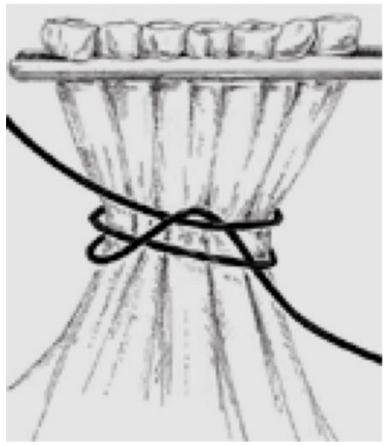
Canine Ovarian Cutaway





Strangle Knot: Ovarian Pedicles & Uterine Body







Strangle Knot: Video

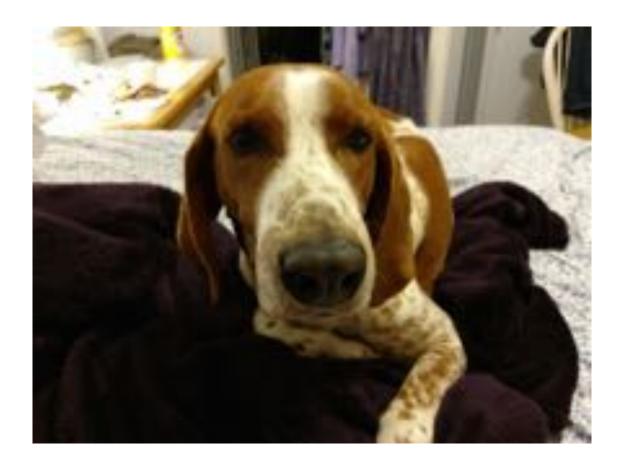


Closure



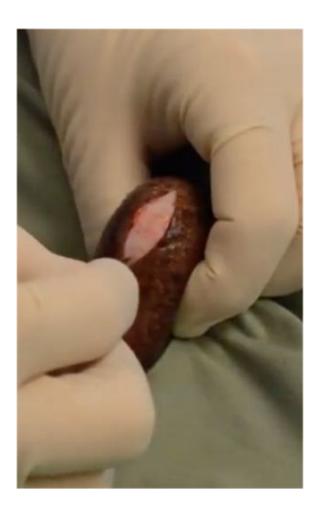


Proficient Surgical Techniques: Adult Male Dog

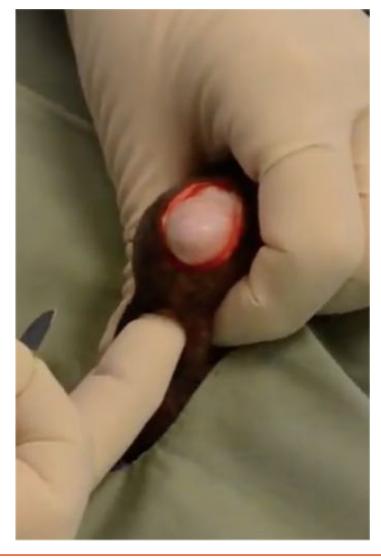


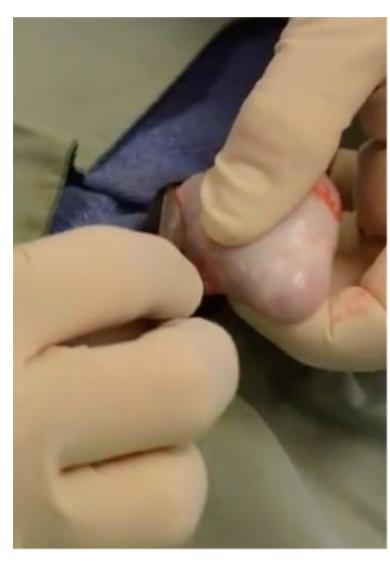




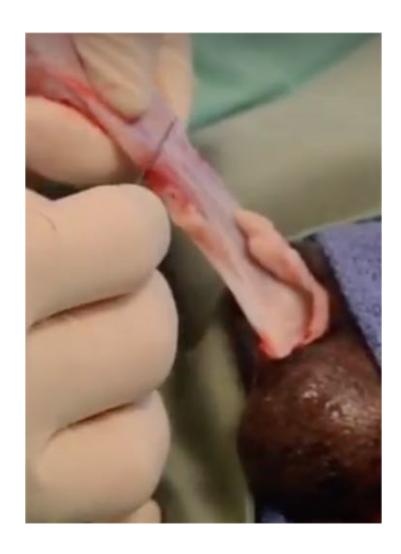


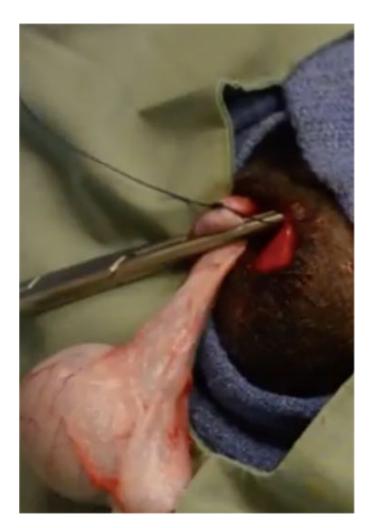




















Enhancement of Surgical Flow





Flow of Patients

- It is typical to follow a surgical order:
 - Pediatric patients
 - Dogs
 - Cats
 - Community cats







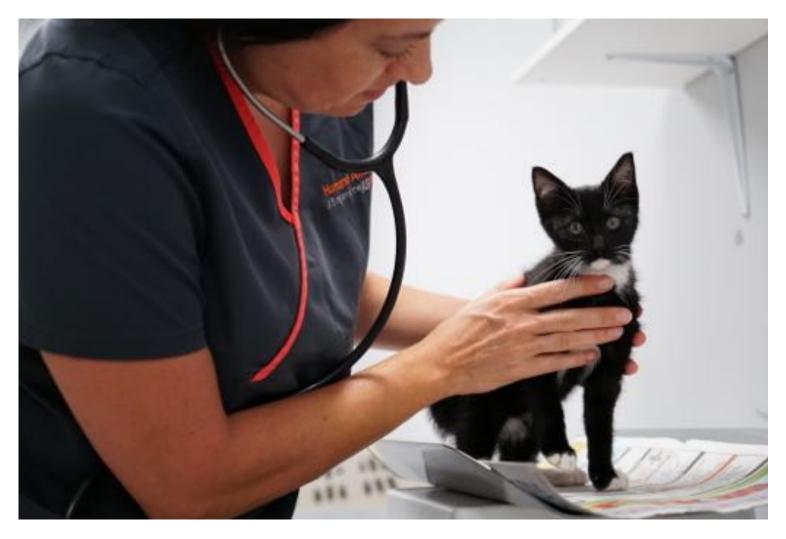


Staff Predicting the Doctor





Streamlining: Patient Intake





Streamlining: Pack Preparation



Surgical Pack Assembly - General Clinic

The contents of these packs may change per your surgeon's request/preferences.

Female Dog Pack (FD)

- · 2 x garmaits (preferably 1 straight and 1 curved)
- 1 x spay hook
- 1 x crile
- 1 x curved mosquito hemostat
- 1 x needle holder
- 1 x thumb forcep
- 1 x pair of <u>Metzenbaum</u> scissors
- 2 x towel clamps
- 5 x surgical towels

Female Cat Pack (FC)

- 1 x Carmalt
- 1 x spay hook
- 1 x grile
- 1 x straight mosquito hemostat
- 1 x curved mosquito hemostat
- · 1 x thumb forcep
- 1 x pair of Metzenbaum scissors
- 1 x needle holder
- · 2 x towel clamps
- 5 x surgical towels

Male Dog Pack (MD)

- 1 x x-large grile or garmalt
- 1 x needle holder
- 1 x thumb forcep
- · 2 x towel clamps
- 4 x surgical towels

All of the packs described above receive 5 pieces of gauze and a sterilization monitor strip.

Male Cat Pack (MC)

Assembled using a wrap and placing contents between two "bottom" towels:

- · 8 x mosquito hemostats
- · 8 x pieces of gauze
- 8 x blades (unopened)











Streamlining: Paperwork











Special Thanks to:



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