



May 2002

Veterinary Surgical Laser Society

From the President's Desk

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www.vetsls.com

Volume 3, Issue 1

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It's springtime! The long winter sleep has passed and we are all renewed and invigorated, ready to take on the challenges of growth and production. There is a clean, crisp, sweet fragrance in the air and the bright sunshine stirs up happiness and warmth deep within my soul. Oh! How I love the spring and the newness of life that it brings. Baby birds are singing, flowers are blooming, the grass is green again, and best of all, FISHING SEASON IS OPEN!

On a more serious side, I was reminded of the value of each new day from a quotation I saw on a wall placard entitled, "The Essence of a New Day". It goes something like this:

"This is the beginning of a new day. You have been given this day to use as you will. You can waste it or use it for good. What you do today is important because you are exchanging a day of your life for it. When tomorrow comes, this day will be gone forever. In its place is something that you have left behind...let it be something good".

This reminds me that VSLS has an opportunity to truly make a difference at the national level. We are all participating in that new day within the realm of veterinary laser surgery. My hope is that I have shared with you enough vision for you to see that if we all work together within this society we can produce a permanent positive impact on our profession. There is a strong need for veterinarians to be properly trained in the appropriate clinical use of laser energy. Our common goal should be to provide a resource for veterinarians to obtain that training and become certified by a board of examiners that would oversee the activities of veterinary laser users. My point is that just because you own a laser doesn't prove that you are proficient in its use. The VSLS makes available to members the most comprehensive network of laser-using veterinarians and the most complete resource of educational opportunities for advancement.

Other laser groups such as SPIES and ASLMS have already met this year and enjoyed great attendance. The most recent meeting of the ASLMS was held in Atlanta in mid-April. Attendance was predominant from human dermatologists, plastic surgeons, ophthalmologists and dentists. There were also two half-days of lectures by and for veterinarians. The exhibit halls were bustling with an enormous variety of lasers and delivery systems, but there were also booths for cosmetics, safety equipment, surgical instruments, textbooks, marketing materials and more. I personally invited many of them to come to the Summer VSLS meeting this June.

I truly hope you have taken your interest in veterinary laser surgery to a higher level and sincerely desire that you will join me at this next upcoming meeting. There is a diverse list of speakers and a live wet lab for training purposes. The opportunity to learn, lobby, network and socialize is unparalleled in our discipline. I encourage you to do something good for your profession: come to the VSLS summer and winter meetings! See you there!

Prepuberal Gonadectomy with Luxar CO² Laser

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Mansfield, Ohio 44906

Summary:

The objective of this study was to evaluate the practical use of a carbon dioxide laser in a small animal practice. Gonadectomy is a large portion of the surgical caseload for most small animal practices and prepuberal gonadectomy is a portion of many surgical practices. The carbon dioxide laser enabled performance of 114 prepuberal gonadectomies in a two-month period in private practice, safely, efficiently, and effectively.

Material and Methods:

Dogs: Ninety-six dogs between the ages of 6 and 16 weeks and weighing 3 to 12 pounds were presented for routine gonadectomy. All were mix breed puppies owned by a local rescue group, Paws and Tails Rescue, Inc.^A All puppies were spayed or neutered prior to adoption by this organization.

All puppies were weighed and examined prior to surgery. A normal physical exam was required to proceed. Only exception included stomach distention caused by parasitism. All puppies demonstrated abdominal fluid during time of surgery. Round worms, hookworms, and whipworms had been identified by fecal floatation in many animals at the Rescue Group facility. Because of the age of the puppies, roundworms were assumed to be the primary cause of the abdominal fluid. Fenbendazole^b was used by the Rescue Group to treat all canines entering their facility.

Puppies were anesthetized with Telazol^c (dose 0.1 ml per 10 pounds of 100 mg/ml solution). Intubation and maintenance with Isoflurane gas anesthesia was routine. No anesthetic complications occurred during induction or maintenance of 96 puppies.

The Luxar CO² 12 watt laser was the primary surgical tool. Traditional steel blade when used to make the initial linea incision in fifty female puppies. Abdominal fluid was reduced with gauze sponges. The uterus was exteriorized in routine fashion. The CO² laser was set at four watts. A 0.3 mm laser tip was used. The laser beam was focused on the ovarian pedicles and incised. The pedicles, while still exteriorized and held with a pediatric hemostat, were cauterized by defocusing the beam. The cervix was treated in like fashion. The linea was sutured with 3 gut in simple interrupted pattern. Skin closure was accomplished with 2 vetaphl, also in simple interrupted pattern. Extubation occurred within minutes. Sternal recumbency occurred within 30 minutes and within two hours, most puppies were standing, alert, comfortable, and ready for alert.

Forty-six male puppies were neutered, completely with CO² laser. A laser scrotal incision was made and the testicles were gently pushed out of the scrotum. The spermatic cords were clamped with a pediatric hemostat. The laser was set at 4 watts and a 0.3 mm tip used. The laser beam was focused and defocused to incise and cauterize the spermatic cord. The scrotum was closed with Nexaband^d tissue glue.

Cats: Seven female kittens and eleven male kittens were spayed and neutered. Ages ranged from 6 to 16 weeks and weights ranged from 1.5 to 2.5 pounds. The actual surgical technique was identical to that used for the puppies. Anesthesia was achieved with a mixture of Diazepam 5 mg/ml 0.2 ml and Ketamine 100 mg/ml 0.1 ml. This mixture was given IV at the rate of 0.1 ml per pound. The kittens were then intubated and maintained on isoflurane anesthesia.

Discussion: The CO² laser can seal vessels up to 0.6 mm in size. This enables us to perform 114 spays and neuters without standard ligatures. Surgeon discretion and experience determined if vessel size was small enough to perform a laser spay or neuter. Puppies over 10 pounds and kittens over 3 pounds often had traditional ligatures.

One puppy died post op, after extubation. Necropsy was unremarkable and no blood was present in the abdominal cavity. Cause of death was not determined.

A follow up survey was sent to all participants, six months after laser surgery. Twenty-three responses were received. Owners were asked to comment about the growth, behavior, and medical history of their pets. Nineteen puppy surveys were reviewed. The owner's perceptions were that the puppies were normal in growth and development, attitude and without medical problems. One report of urinary tract infection was received for one female puppy, but no other information was available. Five kitten surveys were returned all responses were normal.

Conclusion: The American Humane Association (AHA) estimates that 10 –50% of animals are never spayed or neutered. Prepuberal gonadectomy could alter this statistic significantly. The CO² laser could be the tool of choice for performing early spays and neuters.

^A Paws and Tails Rescue, Inc., PO Box 5398, Mansfield, Ohio 44901

^B Panacur: Rousel Vet, Hoech Street, Warren, New Jersey 07059

^C Telazol: Fort Dodge, Fort Dodge, Iowa 50501

^D Nexaband: Veterinary Products Laboratories, Phoenix, AZ 85013

Q & A

Q: Please give me you opinion on purchasing an extended warranty for my laser?

A: Extended warranties can be a great insurance policy against expensive repairs on you laser. This can be especially true for the clinicians that have invested in the high-end lasers. Technician repair fees can run as high as \$1500 to \$2000 alone, not including replacement components. It is important to check to be sure that the extended warranty will actually protect you for major laser equipment components like the media housing canister or the articulated armature. It is also important to know if the shipping costs are included. Shipping alone can run upwards of \$500 dollars. The most important aspect of an extended warranty is the availability of a loaner laser for use while your laser is being serviced. Also note that the longer the policy the less per year warranty cost usually will be.

Q: When using CO2 laser energy for acral granuloma will hair re-growth occur to the affected area after treatment is complete?

A: The integrity of the individual hair follicles is dependent on a number of factors associated with each individual acral granuloma case. The more chronic and infected the region the less likely that hair re-growth will be evident to the treated area. There is also a consideration of the depth of laser energy penetration into the active dermis underlying the granulation and inflammatory tissue. While being aggressive in ablation and de-bulking of acral granuloma sites is key to effective reduction in surface area affected. The potential to completely remove any dormant but active follicles is always a potential outcome. Typically when the area is effectively lasered and other diagnostic factors associated with metabolism, behavior, and mechanical injury are being adequately addressed reduction in the total abnormal surface area and subsequent contraction of the tissue leaves a minimal scar or hairless area. When all factors associated with a specific acral granuloma are effectively addressed. The success rate can be as high as 90 to 95 %. It is important to let the client know that total true hair re-growth to the affected area may take as long as six months to see the final results.

Call: 1-800-375-7994 Fax: 519-767-1101 On-line: www.lifelearn.com (Lifelearn Live)

Mail: Lifelearn Inc., MacNabb House, University of Guelph, Guelph, ON N1G 2W1

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☐ Regular Lunch ☐ Vegetarian Lunch

COMPANION ANIMAL LASER SURGERY

December 6 & 7, 2002

This two-day course includes lectures, demonstrations and wet lab with Peter Eeg, DVM, small animal practitioner and Executive Vice President of Veterinary Surgical Laser Society Ltd. Day 1 – Introduction to Laser Surgery (lectures and demonstrations) for those who are considering offering laser surgical services, or just want to learn the basics to refer clients appropriately. Day 2 – Advanced Procedures – 7 hour wet lab with live animal surgeries in small groups. Equipment Sponsor - AccuVet™ Lasers Lumenis Medical.

All Courses qualify for CE credits from the Ontario Veterinary College

For a complete description or to order on-line visit www.lifelearn.com

(Lifelearn Live) or call 1-800-375-7994

Lifelearn Inc., MacNabb House, University of Guelph, Guelph, ON N1G 2W1

Early registration (before October 31, 2002)			late registration (after October 31, 2002)		
Day 1 (December 6/02)	\$299 CDN	\$219 US	\$399	CDN	\$294 US
Day 2 (December 7/02)	\$749 CDN	\$549 US	\$849	CDN	\$624 US
Full Course (December 6-7)	\$999 CDN	\$749 US	\$1099	CDN	\$824 US

CIRCLE Appropriate Course Fee and fill in TOTAL \$ _____

Payment Method – Canadian Residents add GST/HST ☐ VISA ☐ MasterCard ☐ AMEX

Card No. _____ Exp Date _____ Signature _____

Location:

Lifetime Learning Centre, Ontario Veterinary College,
University of Guelph, Guelph, ON N1G 2W1 (map
Provided upon registration).

Registration:

Includes Morning and afternoon refreshments, lunch,
Parking, binder with notes and a Continuing Education
Certificate from the Ontario Veterinary College.

Lodging:

Accommodation is available at the following
Hotels/Motels in Guelph.

Holiday Inn	519-836-0231
Ramada Inn	519-836-1240
Best Western	519-836-1331
Days Inn	519-822-9112
Willow Manor (B&B)	519-763-3574

Transportation:

Attendees may choose to fly to Pearson International
Airport, Toronto (45 minutes from Guelph) and drive to
Guelph via car or shuttle service – Red Car -
519-824-9344

Cancellation Policy:

90% refunds will be issued for cancellations up to 30 days
prior. No refunds will be issued after that date except under
Special circumstances, when the maximum refund is 50%.
Lifelearn reserves the right to cancel sessions, in which a
full refund will be paid.

