

Le procedure manuali che ogni tecnico deve saper fare,  
guardiamo come farle e parliamone



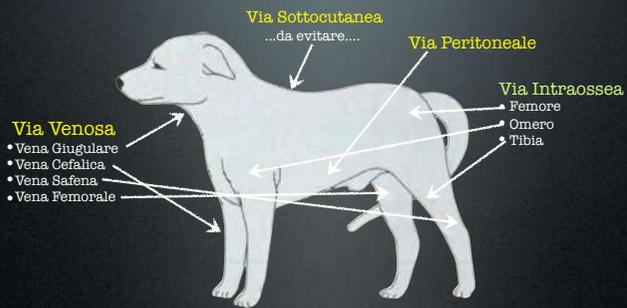
Dott. Paolo Gaglio Ospedale Veterinario Gregorio VII

S.I.M.U.T.I.V.



Società Italiana di Medicina d'Urgenza e  
Terapia Intensiva Veterinaria

### VIE D'ACCESSO PER LA FLUIDOTERAPIA



Diametro in Gauge	Diametro in mm	Colore
13 G	2,41	Rosso
14 G	2,11	Arancione
16 G	1,65	Grigio
17 G	1,47	Bianco
18 G	1,24	Verde
20 G	1,89	Rosa
22 G	0,71	Blu
24 G	0,56	Giallo
26 G	0,43	Viola

Diamètre en Gauge	Couleur	Débit maximum*
18 G	Vert	97 mL/minute
20 G	Rose	66 mL/minute
22 G	Bleu	33 mL/minute

## ACCESSO VENOSO

MINI CUT DOWN

FULL CUT DOWN

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## ACCESSO VENOSO

### FULL CUT DOWN

USATO:

- IN CASI DI GRAVE IPOTENSIONE
- TESSUTI EDEMATOSI



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## ACCESSO VENOSO

### VIE D'ACCESSO PER LA FLUIDOTERAPIA

- VENA CEFALICA DESTRA E SINISTRA
- VENA SAFENA DESTRA E SINISTRA
- GIUGULARE DESTRA E SINISTRA
- IN EMERGENZA VENA FEMORALE DESTRA E SINISTRA
- CATETERE INTRAOSSEO

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## ACCESSO VENOSO

### CATETERE INTRAOSSEO

#### +AGHI UTILIZZABILI:

- CATETERE INTRAOSSEO (SPECIFICO)
- AGO IPODERMICO DA 18,19,21 GOUGE
- AGO SPINALE 22 GAUGE (CON MANDRINO)

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## ACCESSO VENOSO

### CATETERE INTRAOSSEO

#### AGHI UTILIZZABILI



DA "MANUAL OF CANINE AND FELINE EMERGENCY AND CRITICAL CARE" L. KING R. HAMMOND (MODIFICATA)

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## CATETERE INTRAOSSEO

### PUNTI DI ACCESSO:

- ✓ FEMORE (FOSSA TROCANTERICA)
- ✓ ALA DELL'ILEO
- ✓ Omero (TUBERCOLO MAGGIORE)
- ✓ PIATTO TIBIALE (1-2 CM DISTALMENTE DALLA TUBEROSITÀ TIBIALE)



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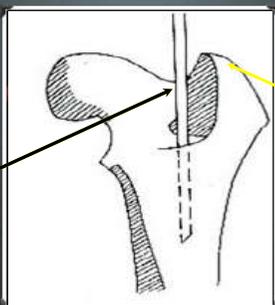
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GRANDE  
TROCANTERE

CATETERE  
INTRAOSSEO

IMMAGINE TRATTA DA "ANATOMIA CLINICA DEL CANE E DEL GATTO" J. S. BOYD (MODIFICATA)

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## POSIZIONAMENTO DI UN CATETERE GIUGULARE

### TECNICHE PRINCIPALI:

- ✓ CATETERE TIPO PEEL-AWAY
- ✓ CATETERE TIPO SELDINGER
- ✓ CATETERE TIPO "THROUGH-THE-NEEDLE"

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## TECNICA PEEL-AWAY

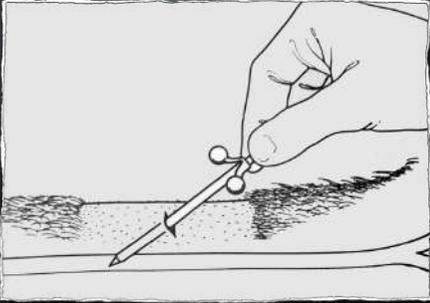


Immagine tratta dal libro "Small animal emergency and critical care" Andrea M. Battaglia

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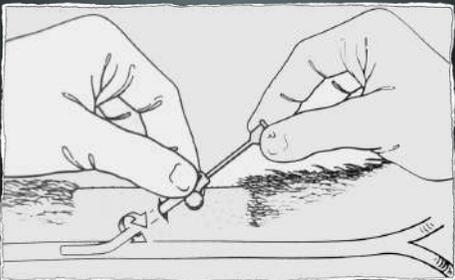


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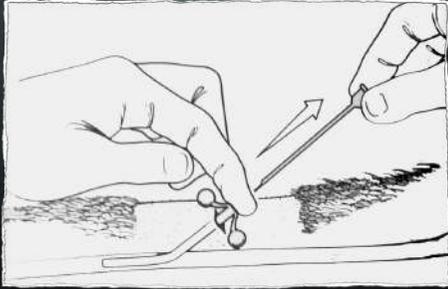


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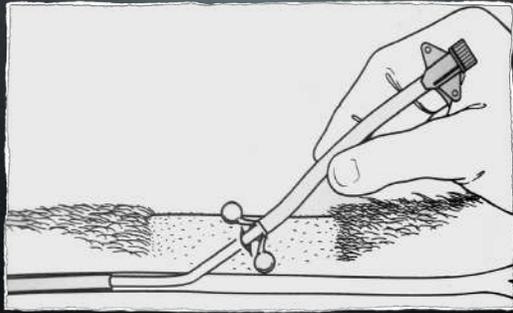


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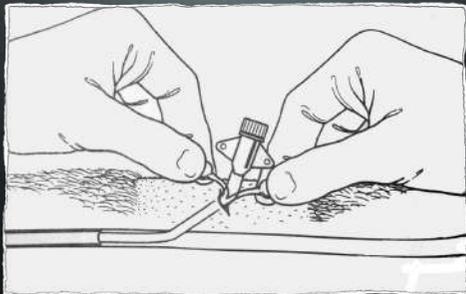
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## TECNICA SELDINGER

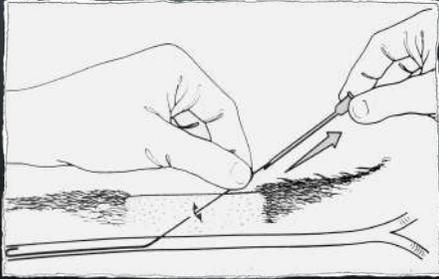


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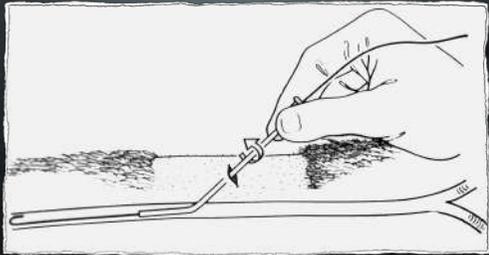


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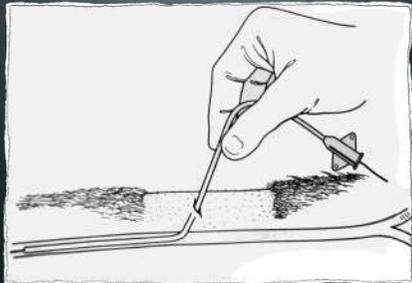


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## TECNICA "THROUGH-THE-NEEDLE"



Immagine tratta dal libro "Small animal emergency and critical care" Andrea M. Battaglia

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## PRESSIONE VENOSA CENTRALE (CVP)

- MISURATA INSERENDO LA PUNTA DI UN CATETERE CENTRALE NELLA VENA CAVA SUPERIORE, A LIVELLO DELL'ATRIO DESTRO (PUNTO O) ATTRAVERSO LA VENA GIUGULARE.
- IL CATETERE È COLLEGATO AD UN MANOMETRO AD ACQUA PER LA MISURAZIONE DELLA CVP

### MISURA:

- LA PRESSIONE IDROSTATICA NELLA VENA CAVA ANTERIORE
- LA DISTENSIBILITÀ VENOSA
- LA PRESSIONE INTRATORACICA

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## PRESSIONE VENOSA CENTRALE (CVP)

- ✓ MUNIRSI DI UNA VALVOLA A TRE VIE
- ✓ COLLEGARE LA PRIMA VIA AL DEFLUSSORE PROVENIENTE DALLA SACCA DEI FLUIDI
- ✓ COLLEGARE LA SECONDA VIA AL CATETERE VENOSO CENTRALE POSIZIONATO SUL PAZIENTE
- ✓ COLLEGARE LA TERZA VIA AL MANOMETRO AD ACQUA

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## PRESSIONE VENOSA CENTRALE (CVP)

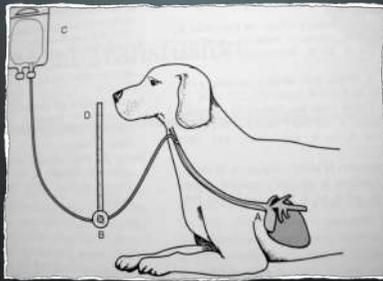


IMMAGINE TRATTA DAL LIBRO "SMALL ANIMAL EMERGENCY AND CRITICAL CARE" ANDREA M. BATTAGLIA

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## PRESSIONE VENOSA CENTRALE (CVP)

- ✓ CHIUDERE LA VIA CHE VA AL PAZIENTE E METTERE IN COMUNICAZIONE LA SACCA DEI FLUIDI CON IL MANOMETRO FINO AL RIEMPIMENTO DELLA COLONNINA.
- ✓ CHIUDERE LA VIA CHE VA ALLA SACCA E METTERE IN COMUNICAZIONE LA VIA CHE VA AL PAZIENTE CON IL MANOMETRO.
- ✓ LA MISURAZIONE DELLA DISTANZA DAL PUNTO ZERO AL PUNTO DI STAZIONE DELLA COLONNA DI H<sub>2</sub>O FORNIRÀ IL VALORE DELLA PRESSIONE VENOSA CENTRALE

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## Evaluation of small-bore wire-guided chest drains for management of pleural space disease

**OBJECTIVE:** To evaluate the efficacy and practicality of a small-bore wire-guided chest drain for management of pleural space disease in dogs and cats.

**MATERIALS AND METHODS:** A 14 gauge chest drain was placed using a modified Seldinger technique in animals requiring ongoing management of pleural space disease. A questionnaire was used retrospectively after placement to collect data regarding the ease of placement, reliability and function of the drain.

**RESULTS:** Twenty animals were enrolled in which 29 drains were placed. The mean survival pleural space disease resected was 120 days (SD of 20). Sixteen animals required additional placement, and 25 of 29 chest drains were inserted at the first attempt. Most drains were placed in less than 30 minutes. The median length of time of catheter use was three days. Few complications were noted during the insertion and throughout the use of the drains. Clinicians rated drain placement as 'easy' in 27 of 29 cases and the drain function as 'good' in 24 of 29 times.

**CONCLUSIONS:** Small-bore wire-guided chest drains are an effective alternative to larger gauge drains. Only minor complications were seen during insertion of the chest drains, and their performance was deemed satisfactory in most cases.

Small-bore drains and a piggyback catheter (Chest 10/16, Lave and others 2003, Figure 2003). There are few guidelines in the current literature regarding the insertion of chest drains (Tillett 1973 and Douglas 2004), and only a small number of studies involving wire-guided chest drain insertion and use (Cheremisin and others 2002, Winkler and others 2002, Berry and others 1993, Townsend and Walsh 2004, Murray and others 2007). Many practitioners currently use coarse-gauge drains inserted using suction to place them within the pleural space. The technique is no longer recommended in horses because of the high complication rate (Baker and others 1997, Lantieri and others 2004, Forster and others 2006, Bell and others 2007). The use of fine-gauge tubes is discouraged in cats and small dogs because of their high fracture risk and tendency to become dislodged (Lantieri and others 2004, Forster and others 2006). Other methods include a 'trial drainage', which includes thoracocentesis performed using a set of haemocoma tubes, a new system that has proved to be one of the least traumatic to the pleural space (Tillett 1976, Douglas 2004, Clay 2007). Large drains or heavy catheters is required for these techniques in some animals which may be undesirable in certain severely unstable or debilitated animals (Cheremisin and others



MLA Chest Drain kit

C. WATSON AND S. RANBYER | INTRODUCTION