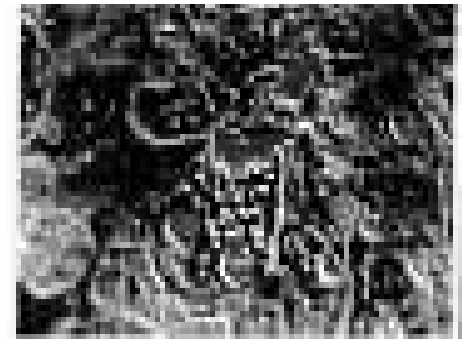


TRAITEMENTS NON MÉDICAMENTEUX

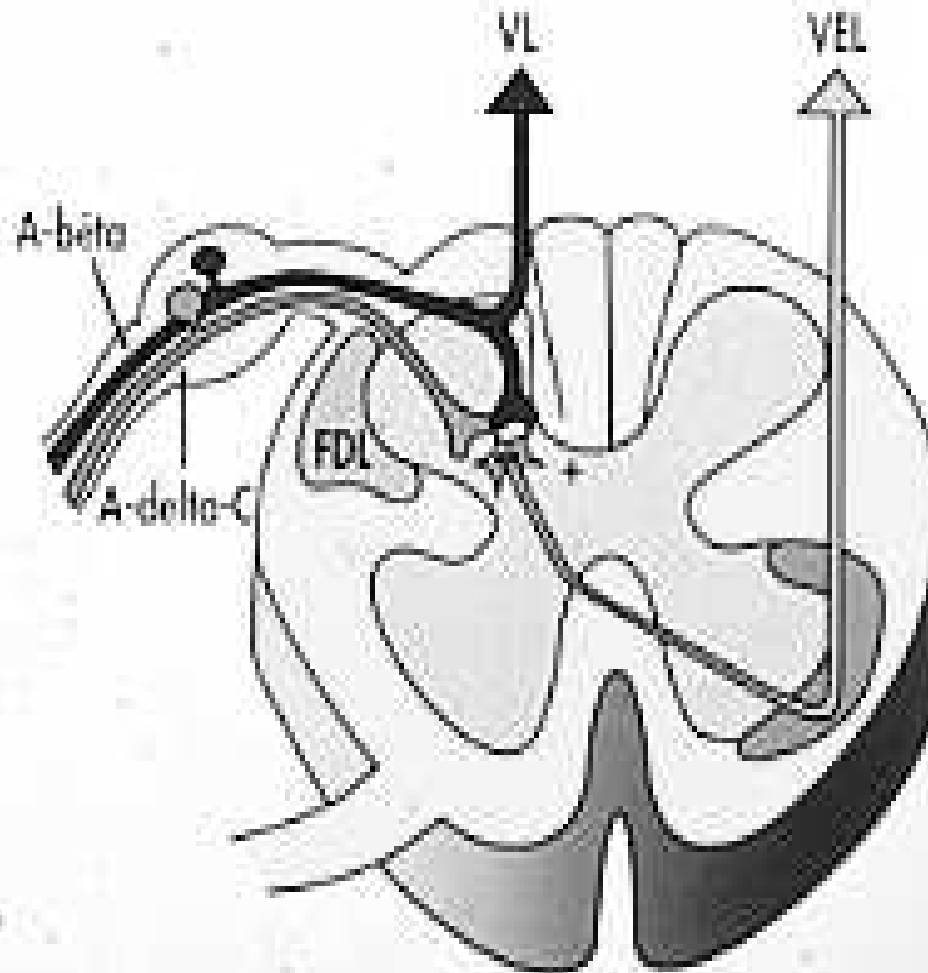
DOULEURS NEUROPATHIQUES

- Stim. Transcutanée ++
- Stim. nerfs périphériques
- Stim. Médullaire +++
- Stim. thalamique
- Stim. du cortex moteur ++
- RF coagulations - Drezotomie
- Pharmacothérapie intra-thécale

Le contrôle de la douleur niveau médullaire



Le gate-control

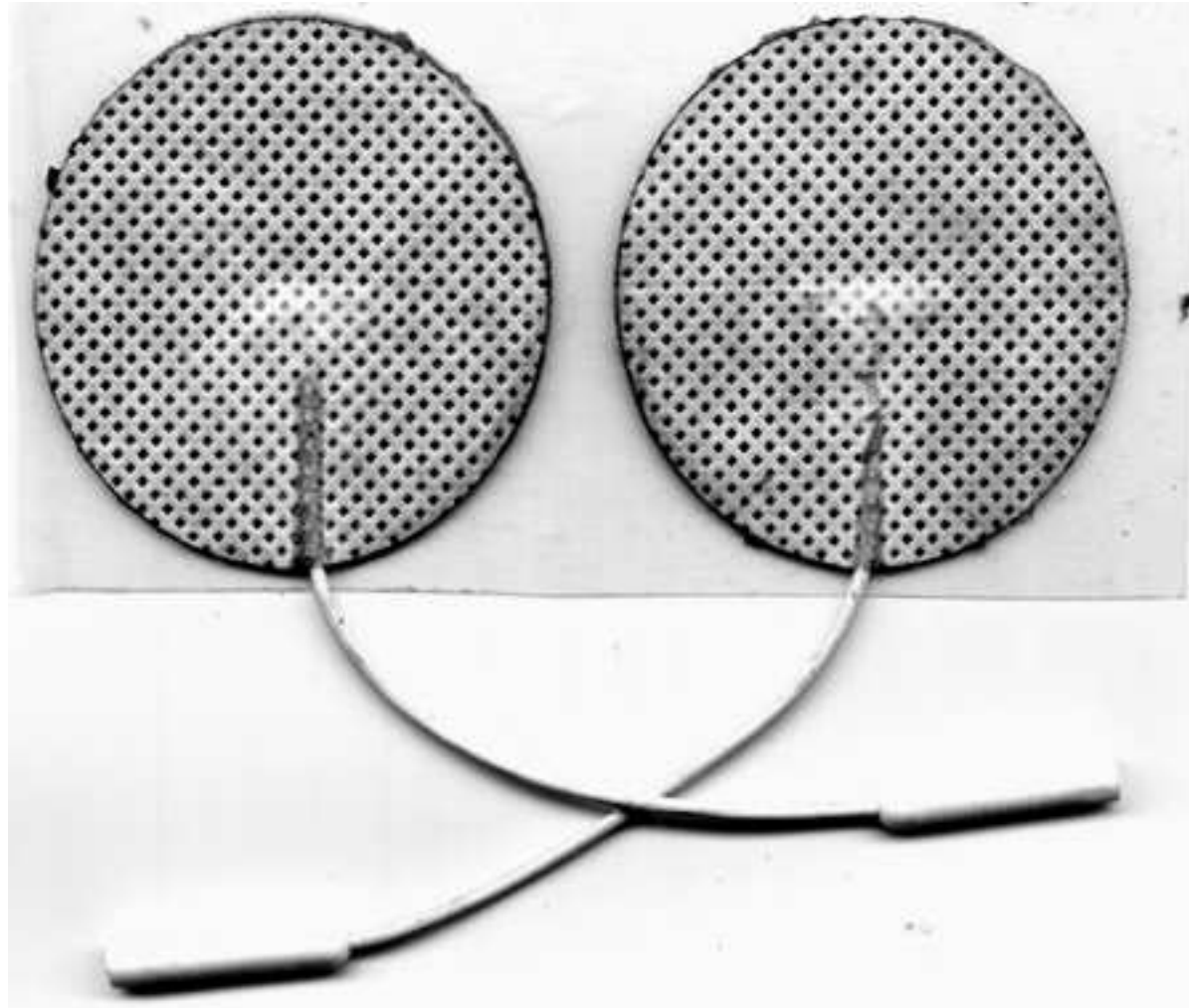


FDL : faisceau dorso-latéral
VL : voie lemniscale
VEL : voie extra-lemniscale

STIM. TRANSCUTANEE

- Douleurs neuropathiques spontanées
 - *continues
 - *éviter si allodynie ou hyperalgésie
- Voies sensibles fonctionnelles (au moins partiellement)
- Test pour la stim. épidurale ?







Indications S.T.C

- **Douleurs post-zostériennes**
- **Douleurs cicatrices(chirurgie,trauma)**
- **Douleurs des amputés**
- **Douleurs tronculaires**
- **Douleurs radiculaires(n.c.b ,sciatique)**
- **Cervicalgies,dorsalgies,lombalgies**
- **Fibromyalgie / Douleurs myofasciales**

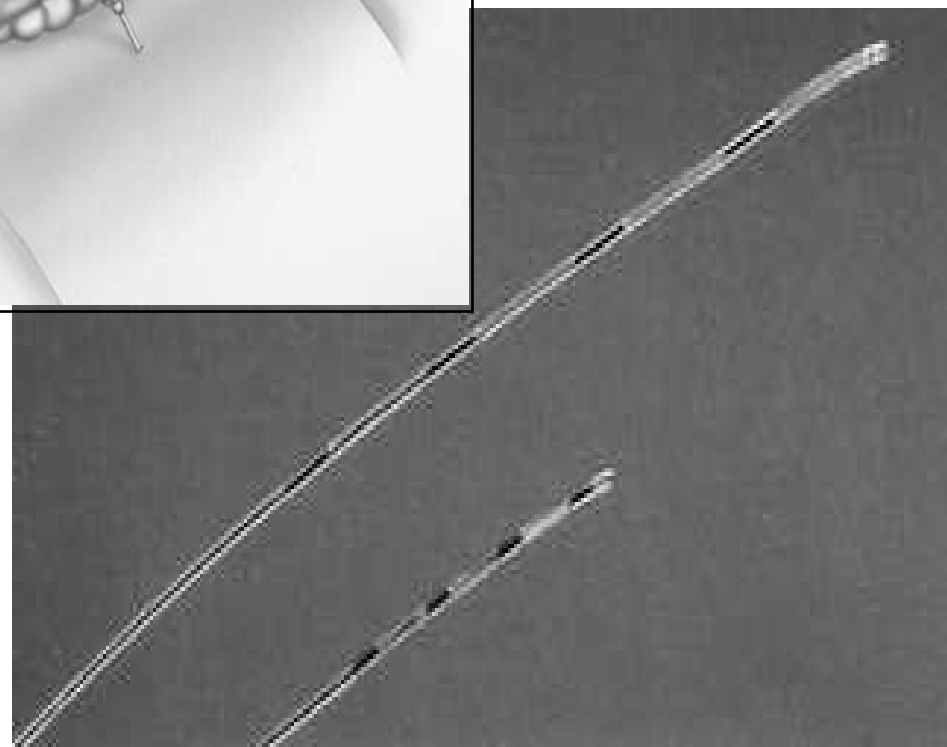
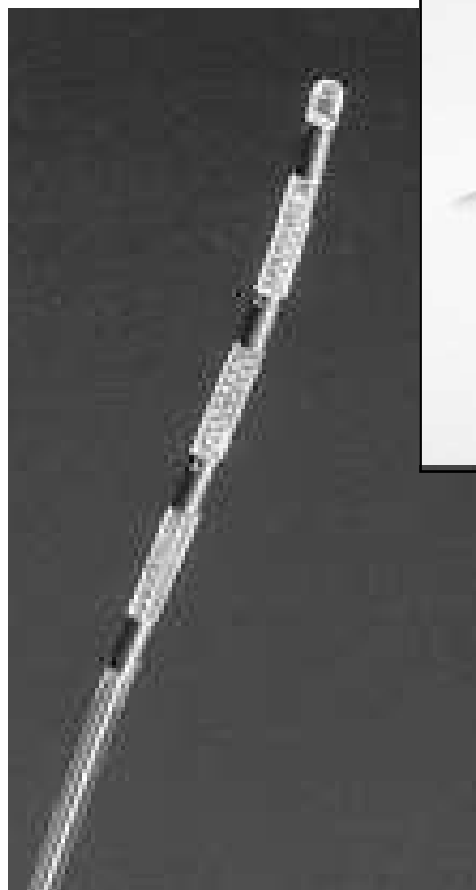
STIM. MEDULLAIRE

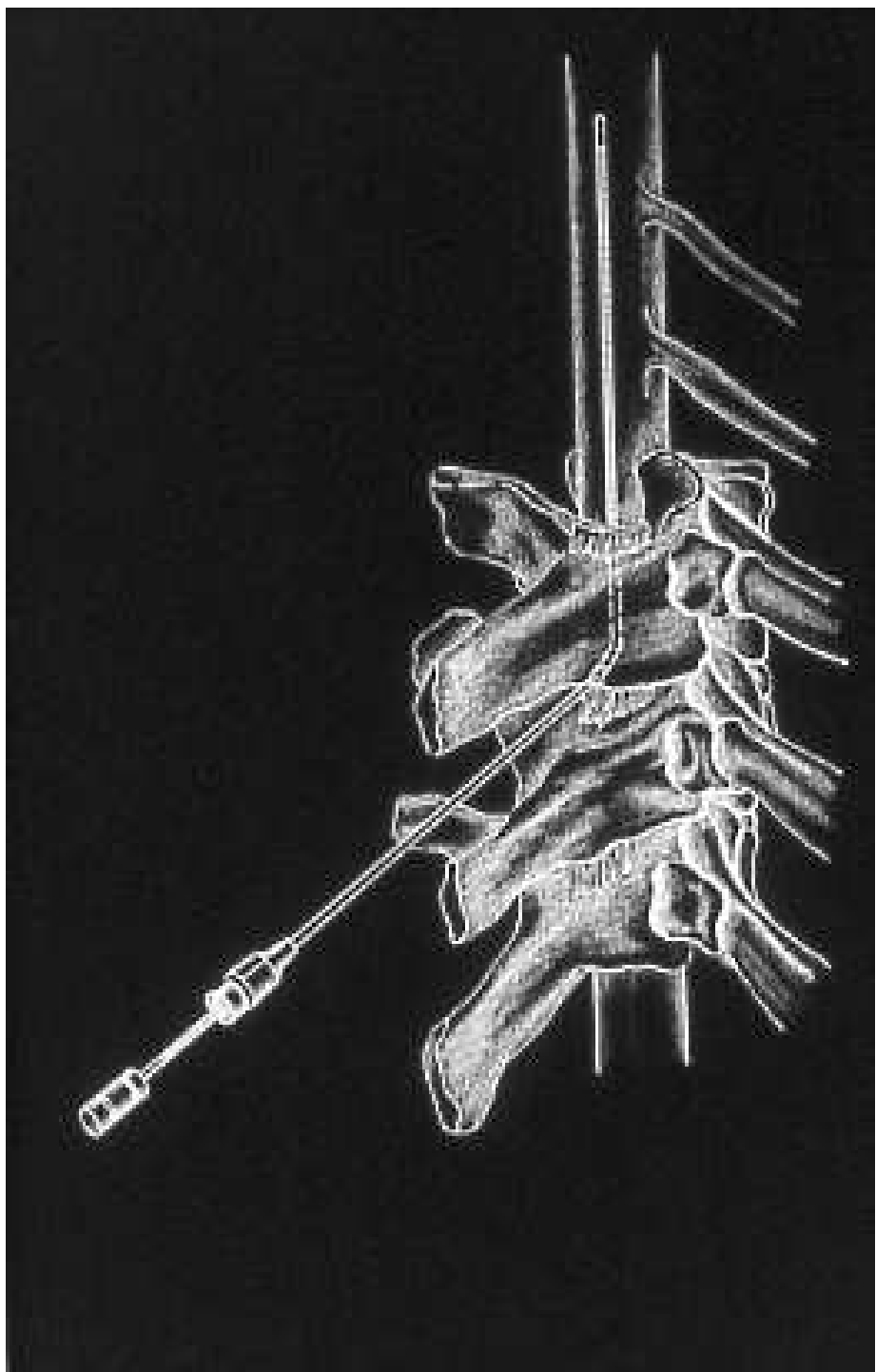
- Douleurs neuropathiques radiculaires ++
- Stimulation sus-lésionnelle
 - Sciaticques neuropathiques
 - = chirurgie discale
 - = chirurgie canal étroit
 - = arthrodeèse
 - Neuropathies périphériques
 - Douleurs membres post-algodystrophiques

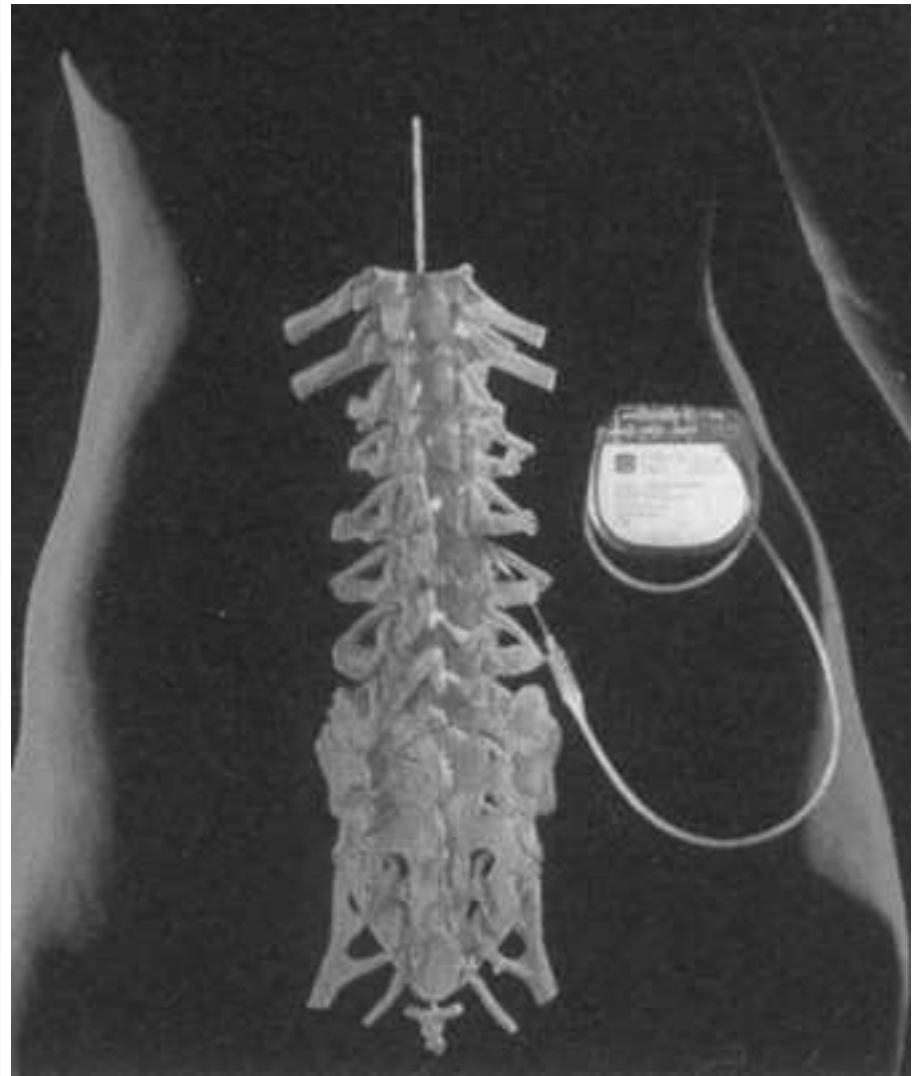
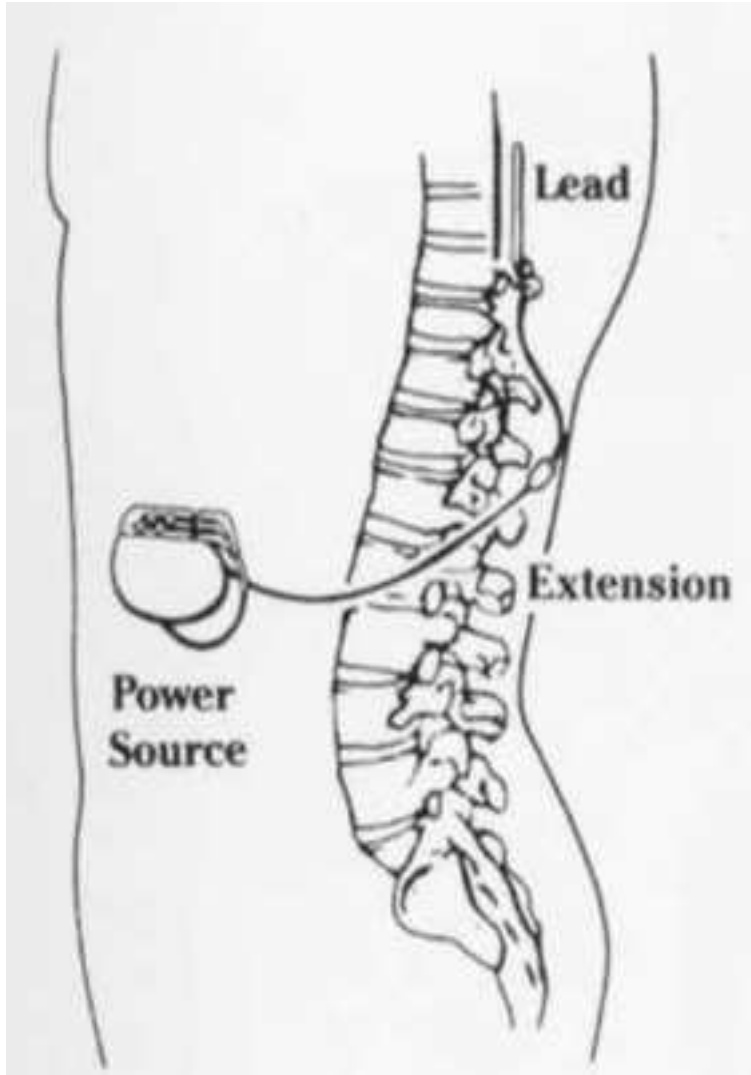
TEST PAR VOIE PERCUTANEE

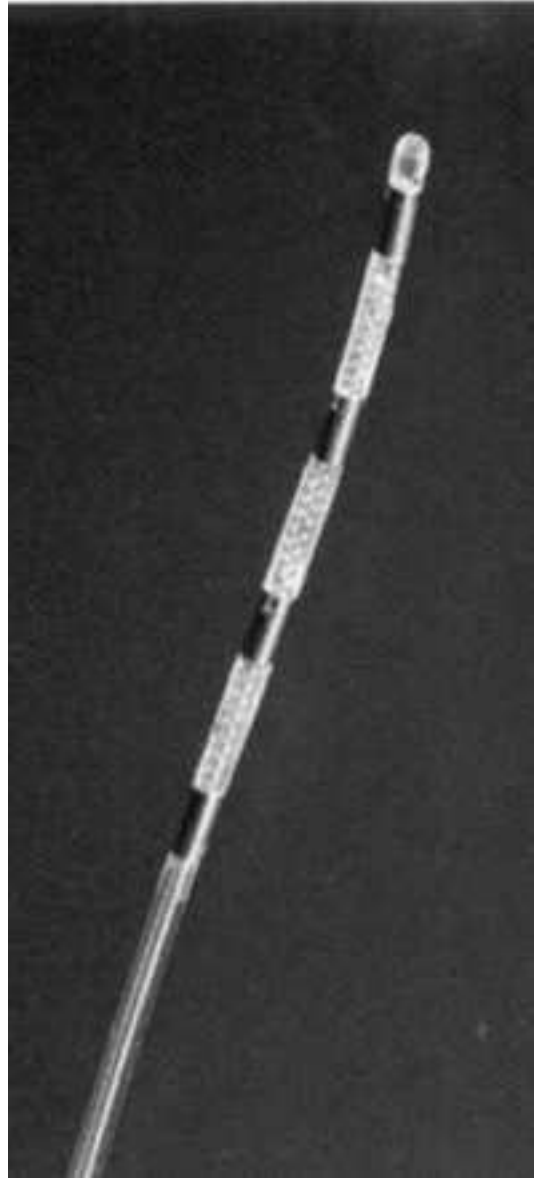


**Électrode
Pisces-Quad**

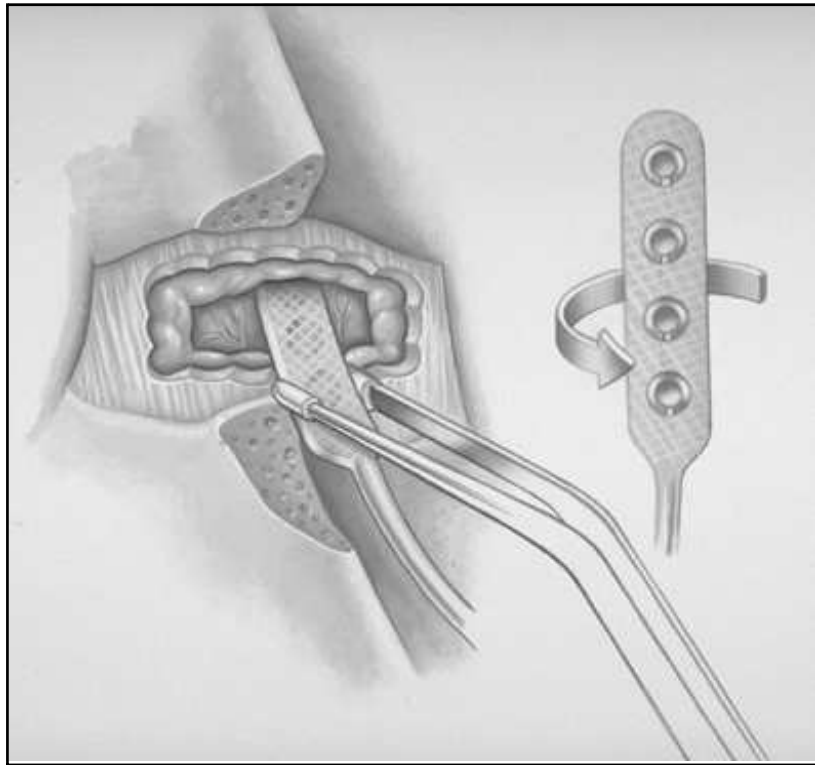




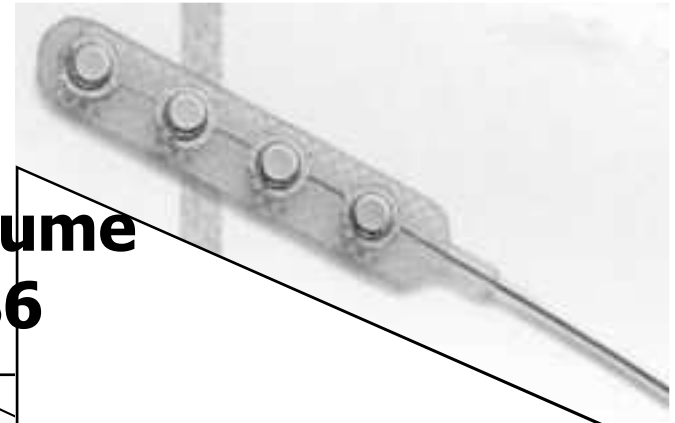




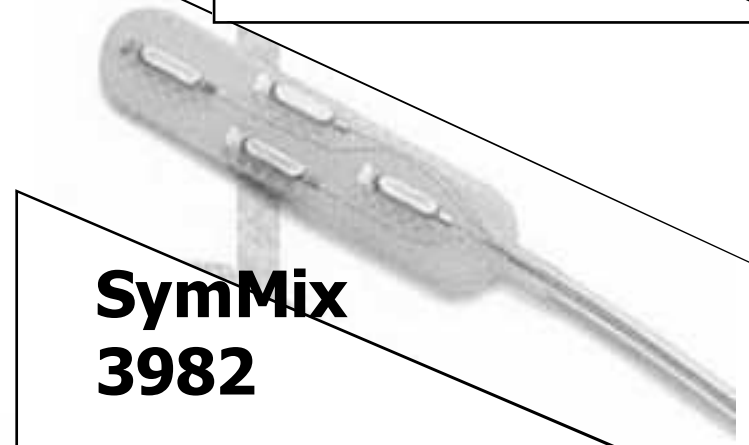
Les Électrodes chirurgicales



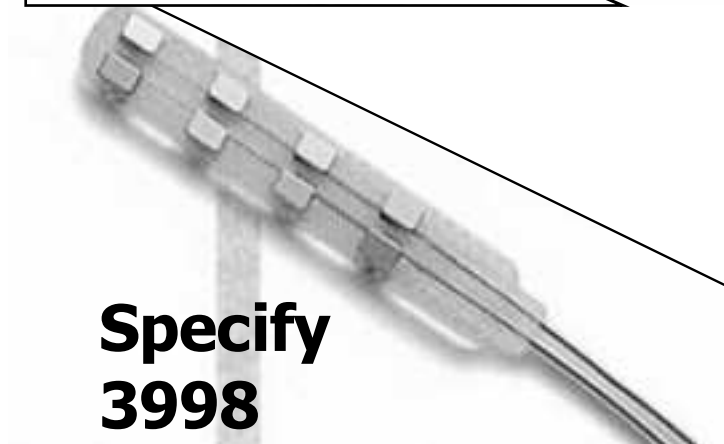
**Resume
3586**



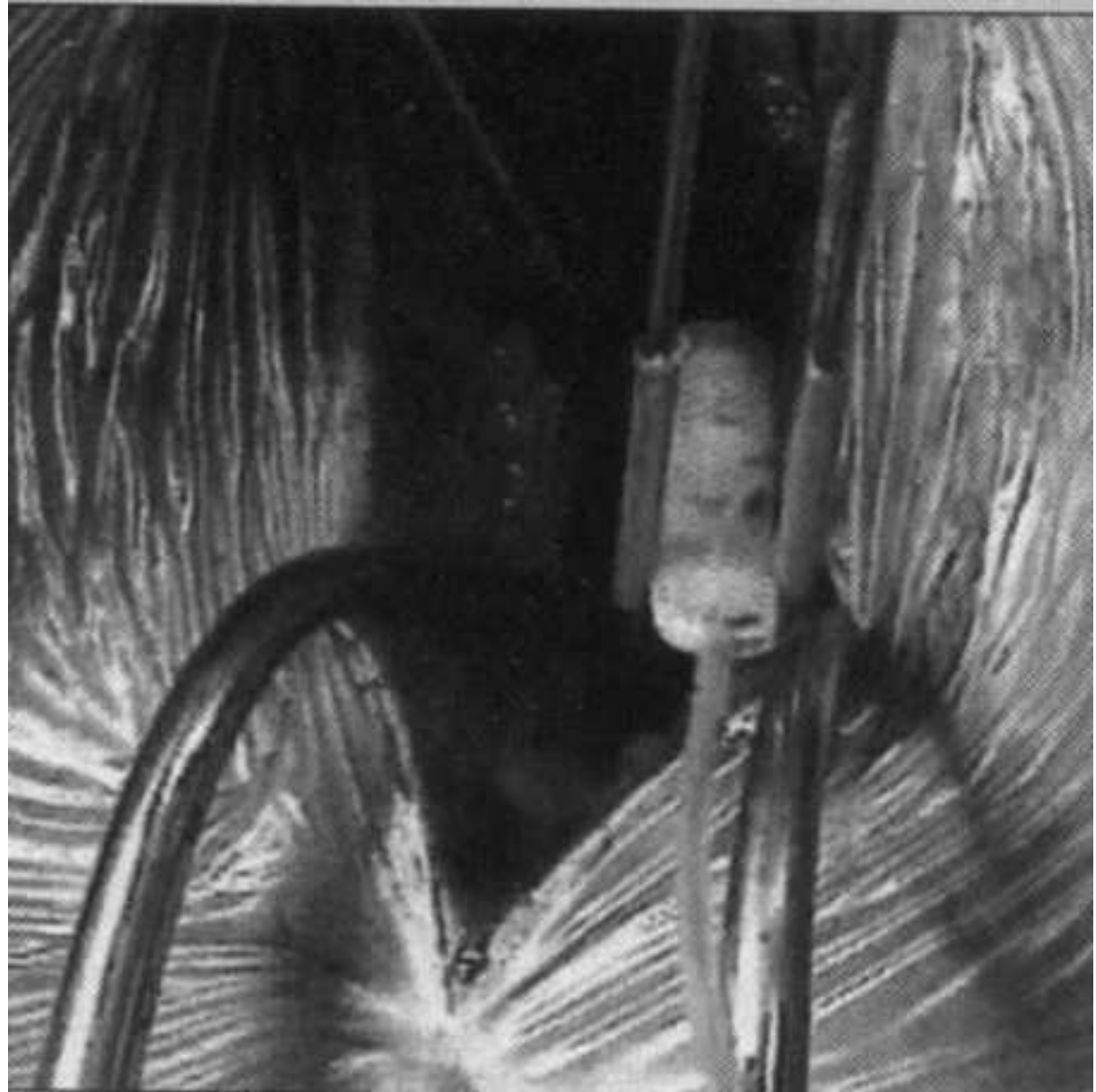
**SymMix
3982**

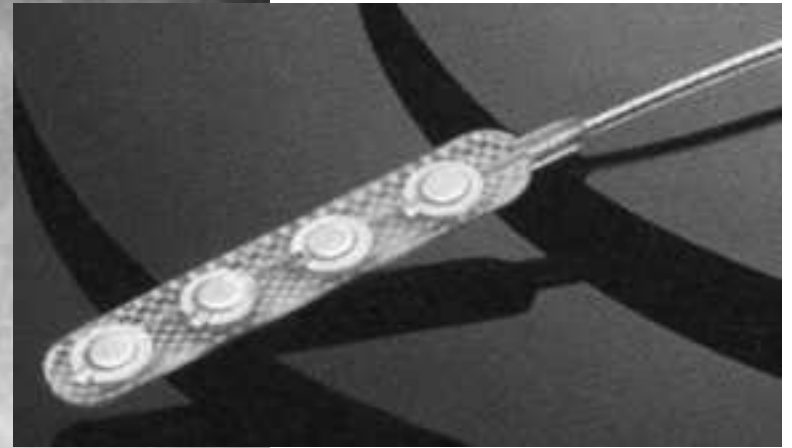
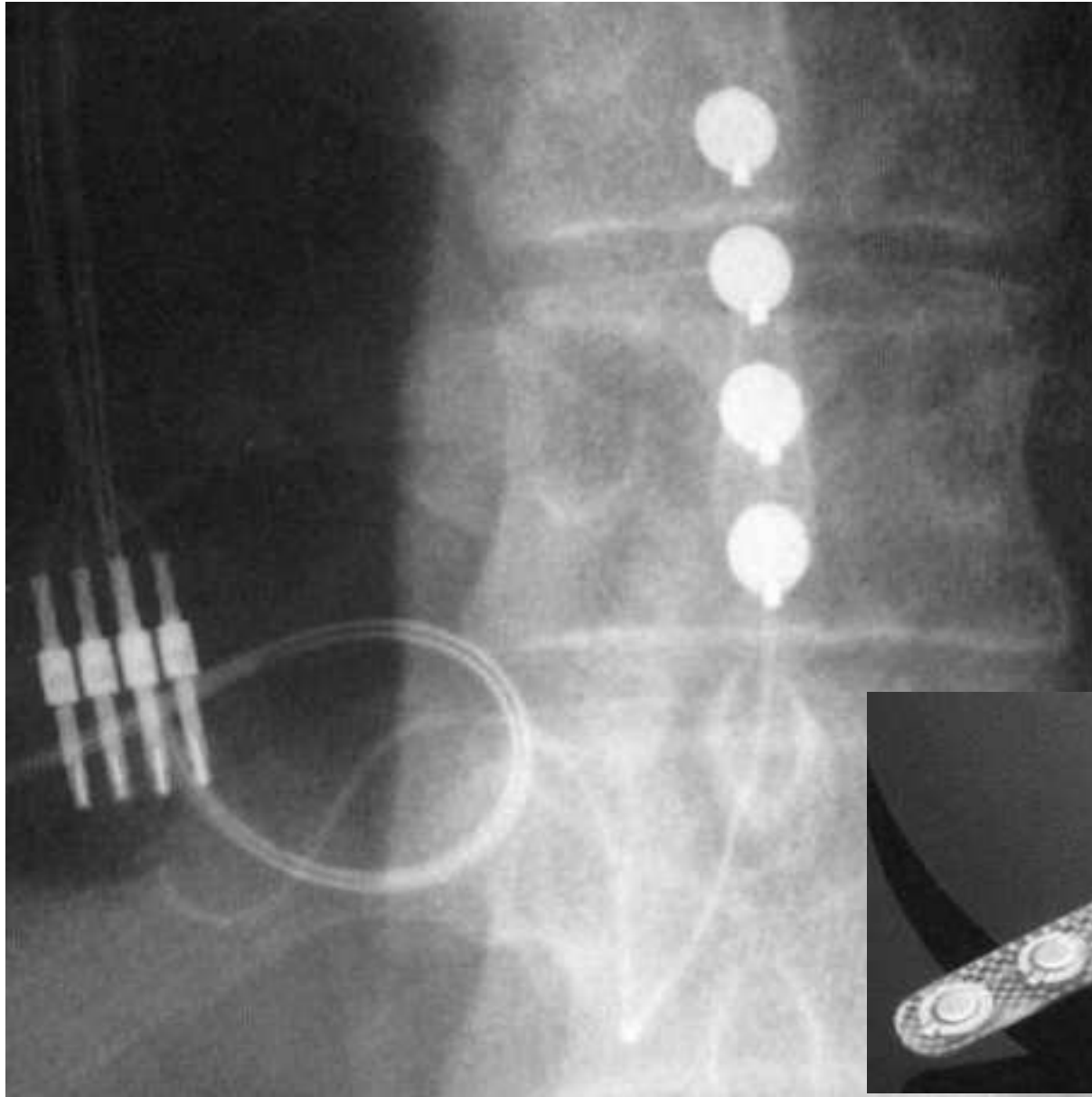


**Specify
3998**



Mise en Place







INTEL
80486



NON-REPROGRAMMABLE
3.3V SUPPLY
387 GENERATION
DTJ 100045R
MOBILE
MADE IN MALAYSIA

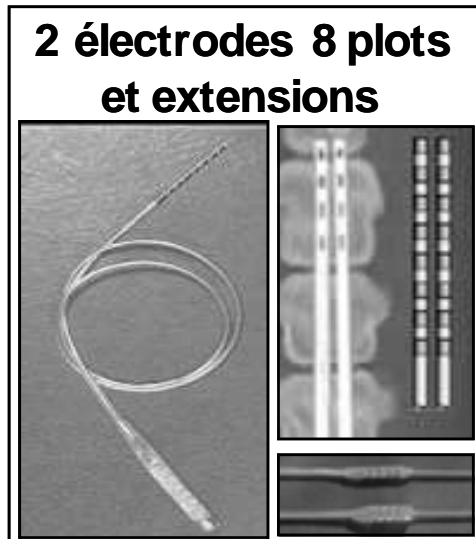
Matériel : Stimulateurs

- **RESTORE 37711**
- **1^{er} stimulateur rechargeable d'une durée de vie de 9 ans quels que soient les paramètres.**
 - Adapté pour des douleurs multifocales et pour les fortes stimulations.
 - Repositionnement électronique possible
 - Moins d'interventions chirurgicales pour le patient

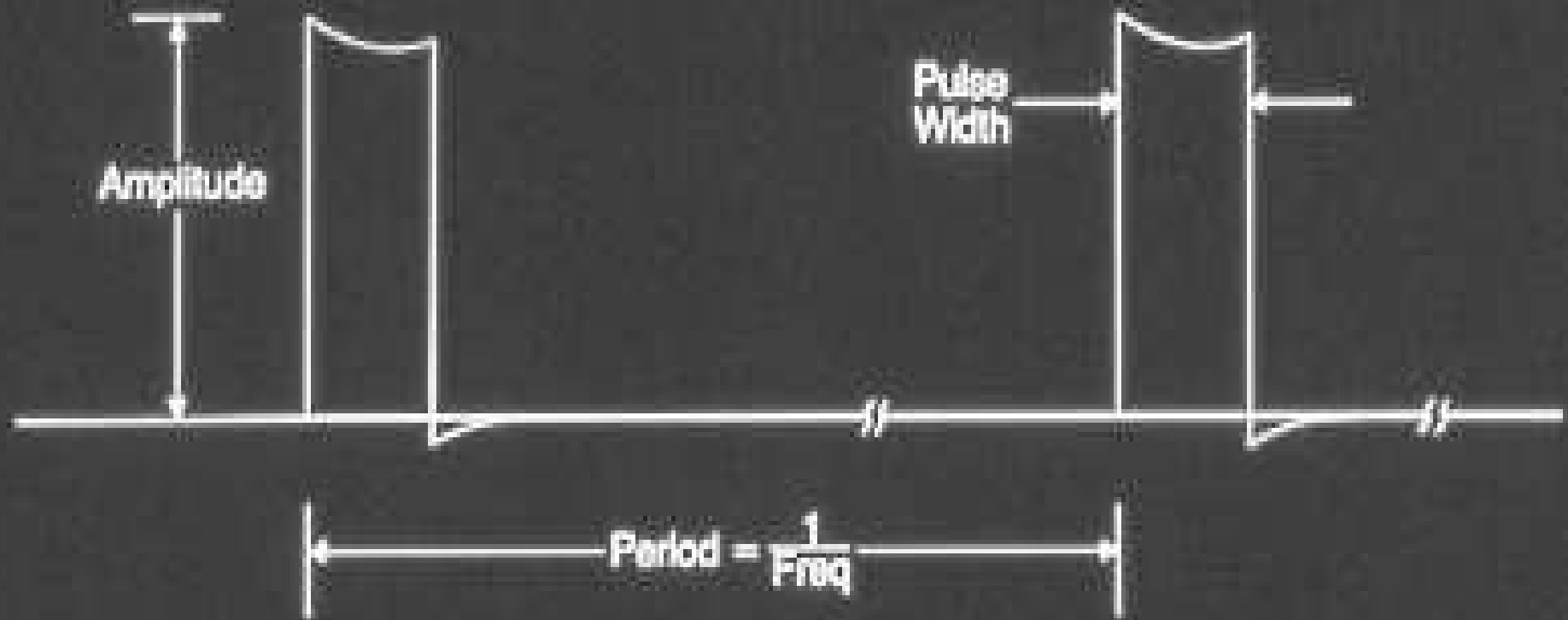


Matériel : Stimulateurs

➤ Le système Restore Complet



Typical Pulse



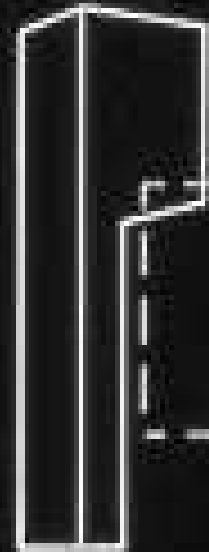
Matériel : Programmeur

- N' VISION 8840
 - Programmation non invasive



Telemetry

Programming Head



Coded RF Command Signal Transmitted



Coded RF Status Signal Received and Verified



Body Skin



Coded RF Command Signal Received



Coded RF Status Signal Transmitted



SXN IPG



Antenna

Telemetry



Stimulateurs / Télécommandes

**Mono-Canal = ITREL®3
(7425 ou 7425KIT)**

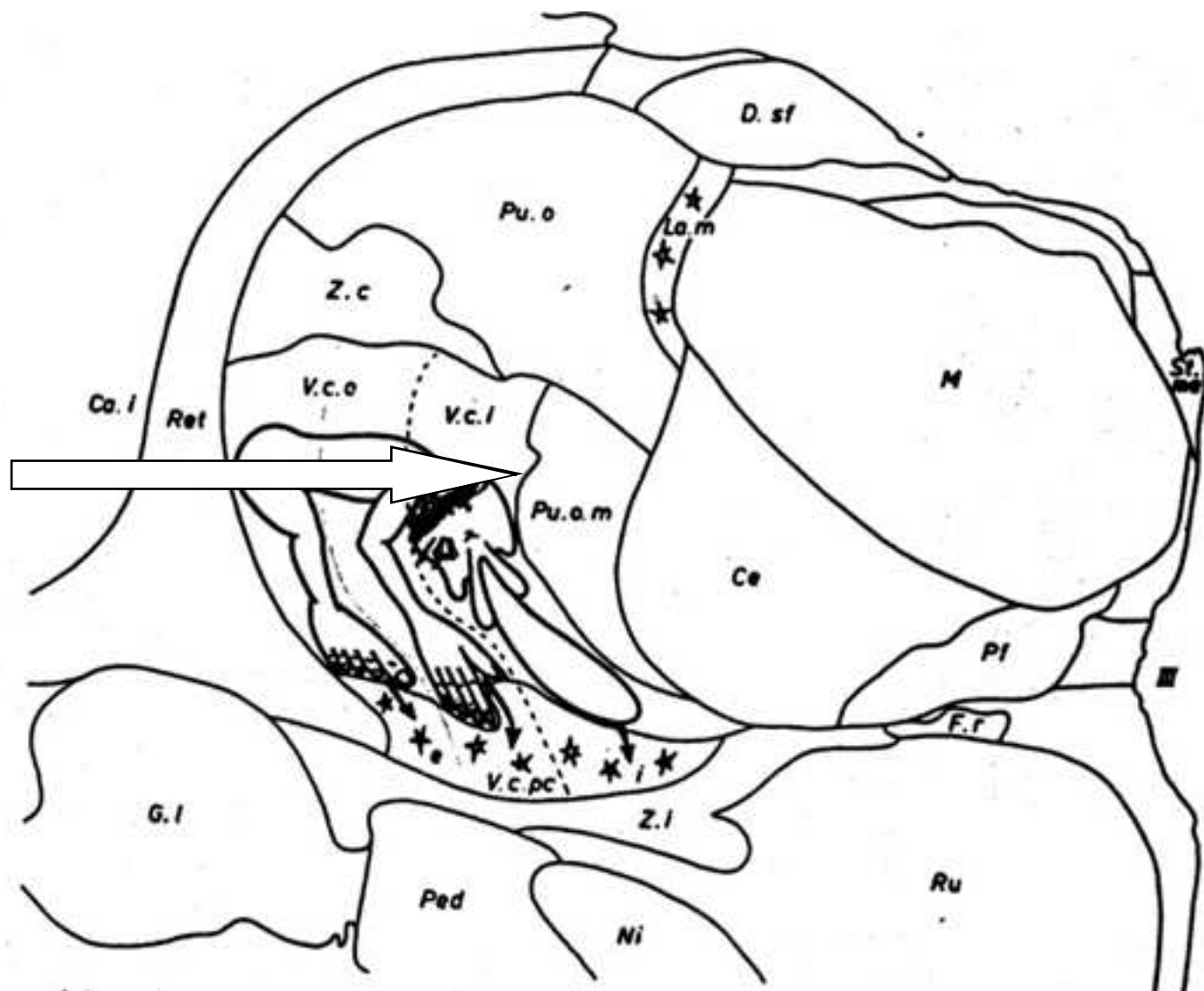


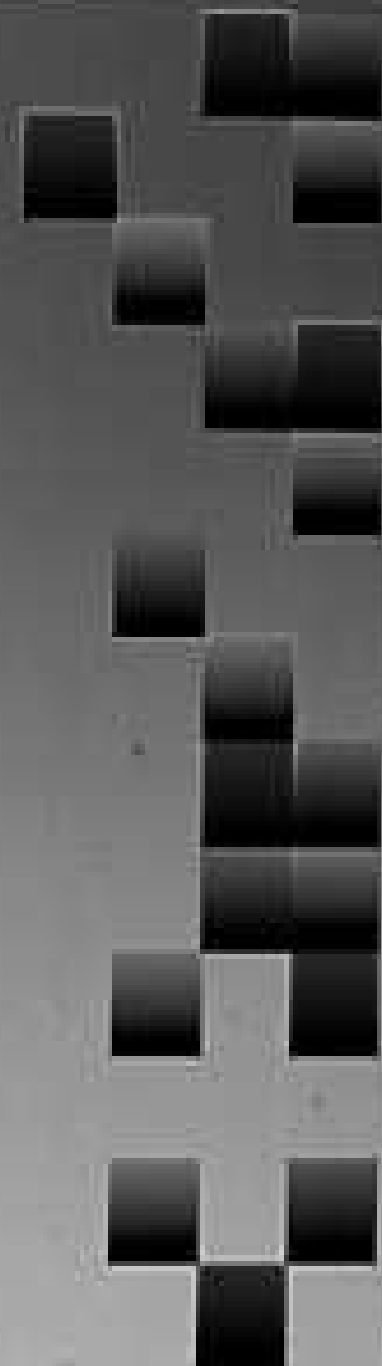
**Double-Canal = SYNERGY
(7427 ou 7729 = KIT)**

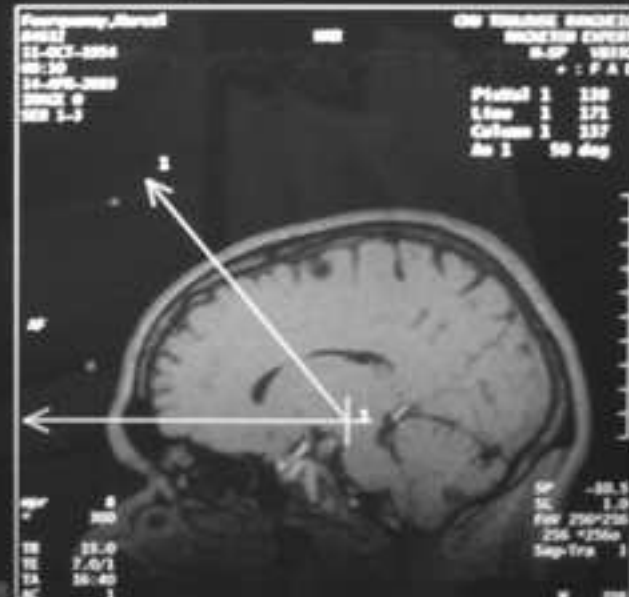
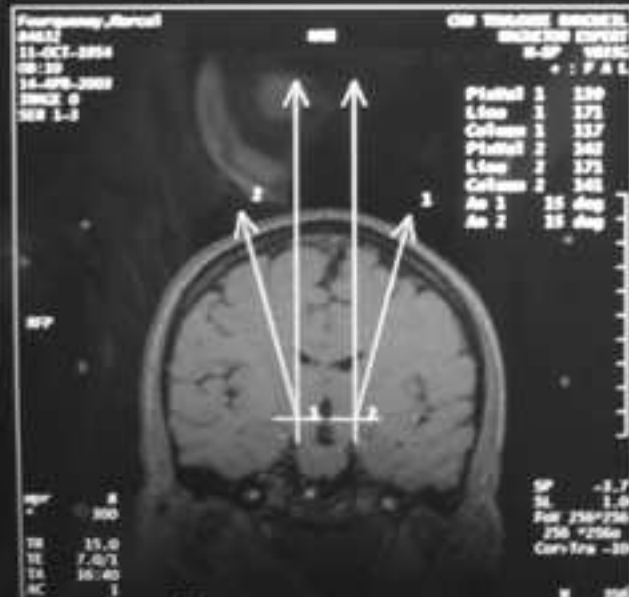
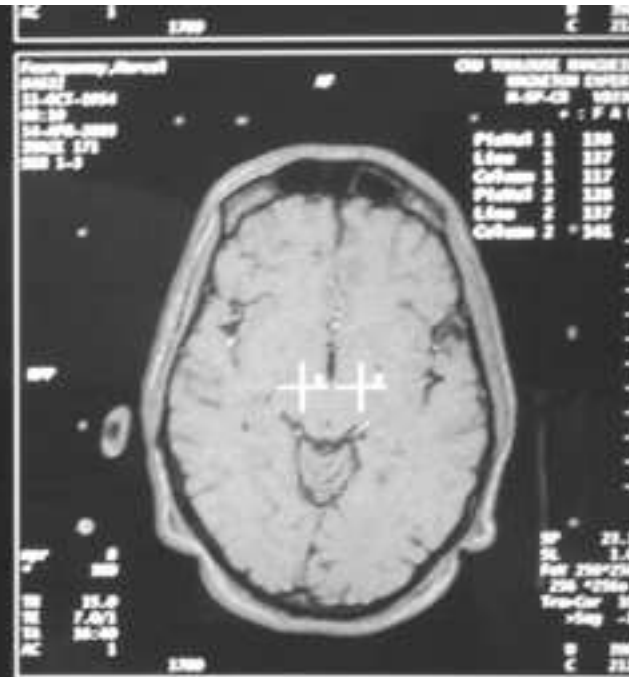
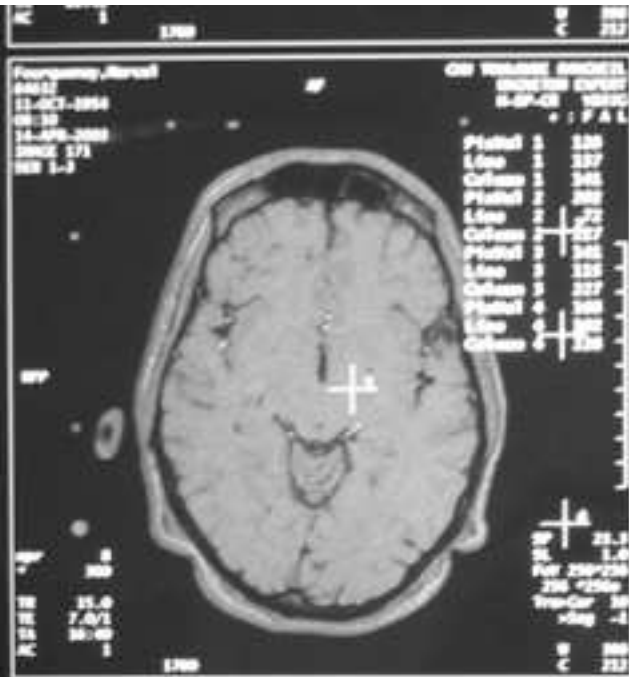


STIM. THALAMIQUE

- Stim. des noyaux sensitifs(VPL)
- Stéréotaxie(repérage IRM)
 - Douleurs plexiques
 - Douleurs médullaires
 - Douleurs trijéminalales
 - = zona- trauma – séquelles chir.
 - Douleurs tronc cérébral (Wallenberg)



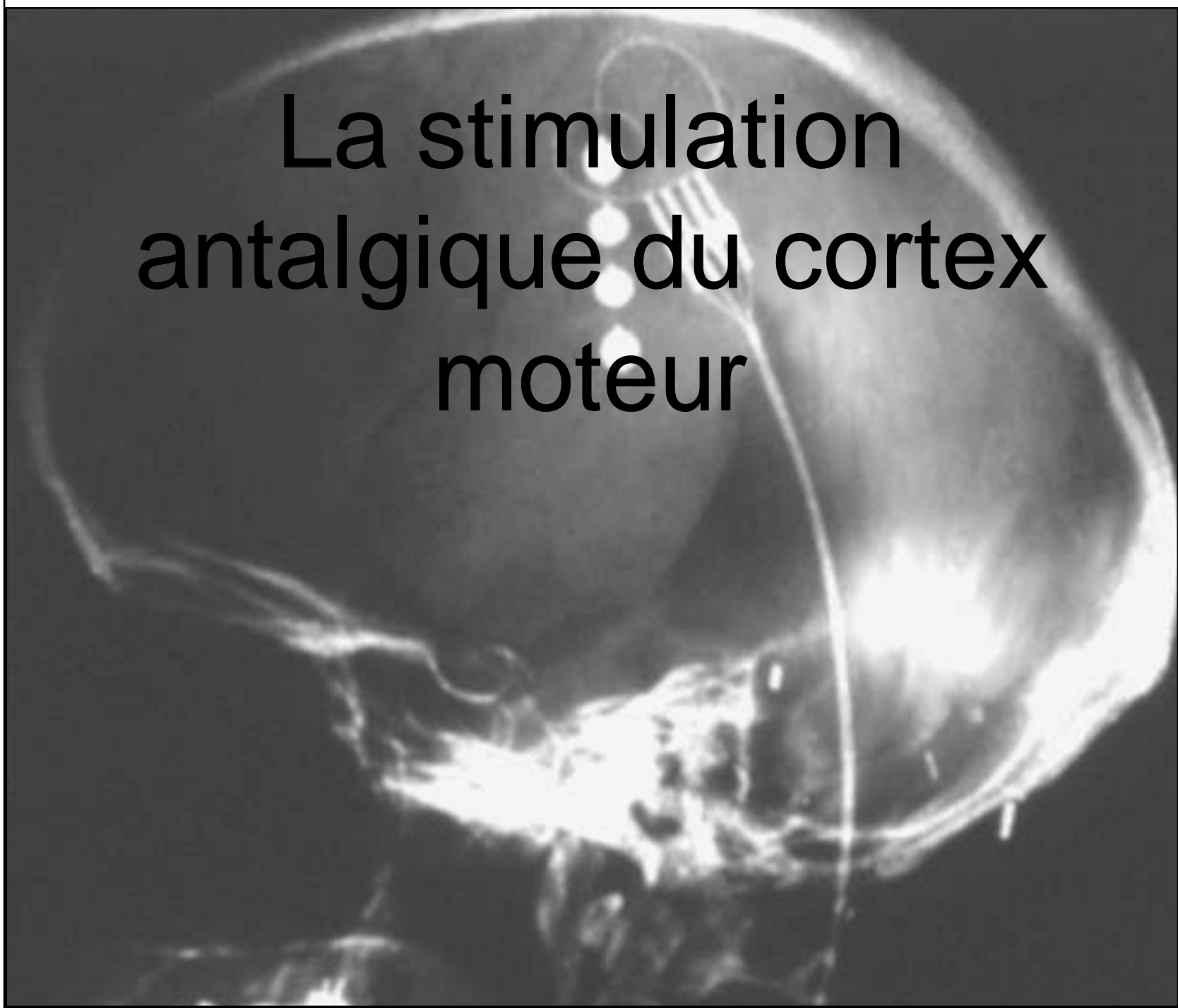




STIM. CORTEX MOTEUR

- Douleurs neuropathiques centrales
- Indications :
 - membres fantômes – plexus brachial
 - douleurs médullaires
 - douleurs tronc cérébral
 - douleurs thalamiques et apparentées
- Patient répondeur? (stim.magnét.transcran?)

La stimulation antalgique du cortex moteur



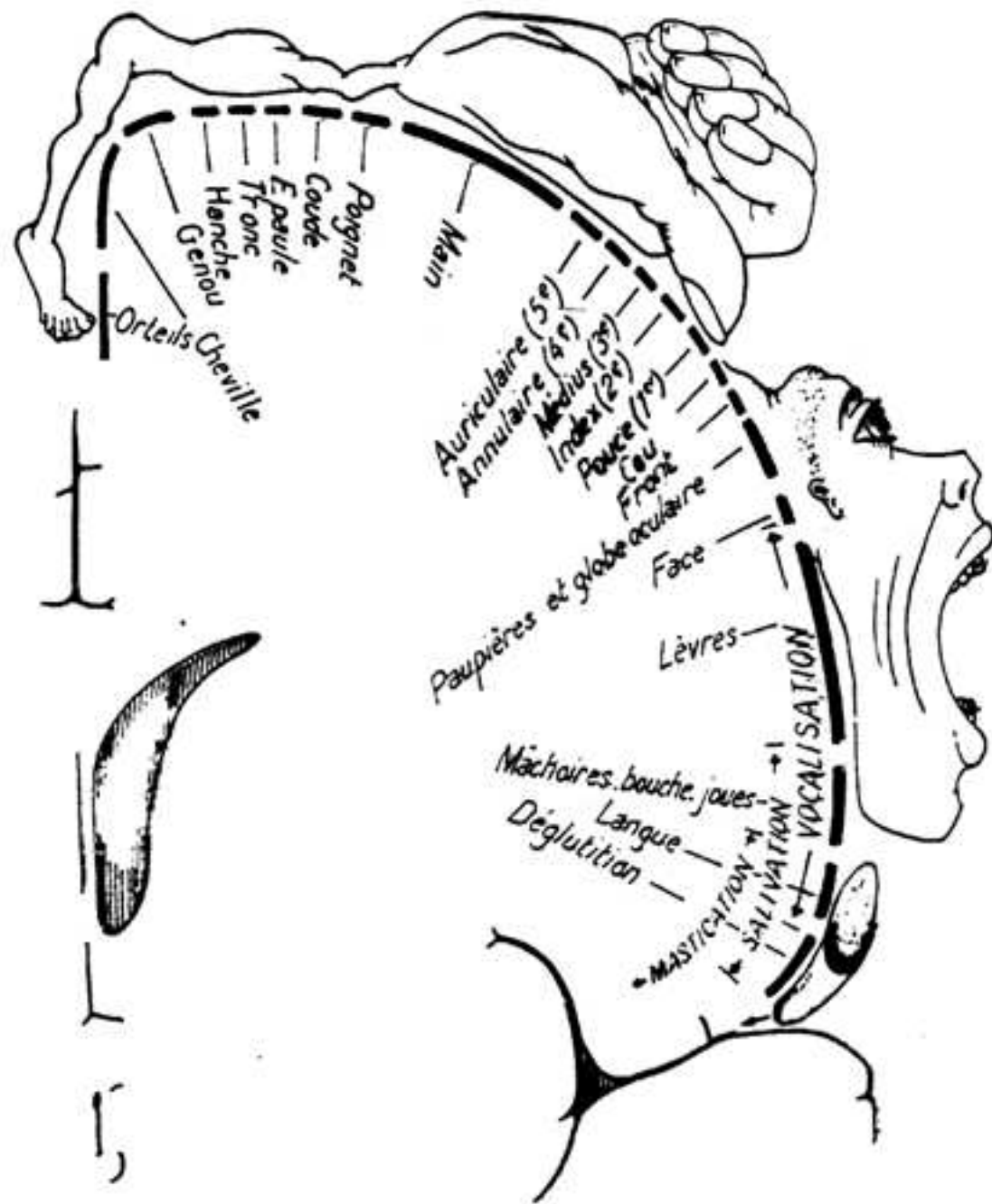
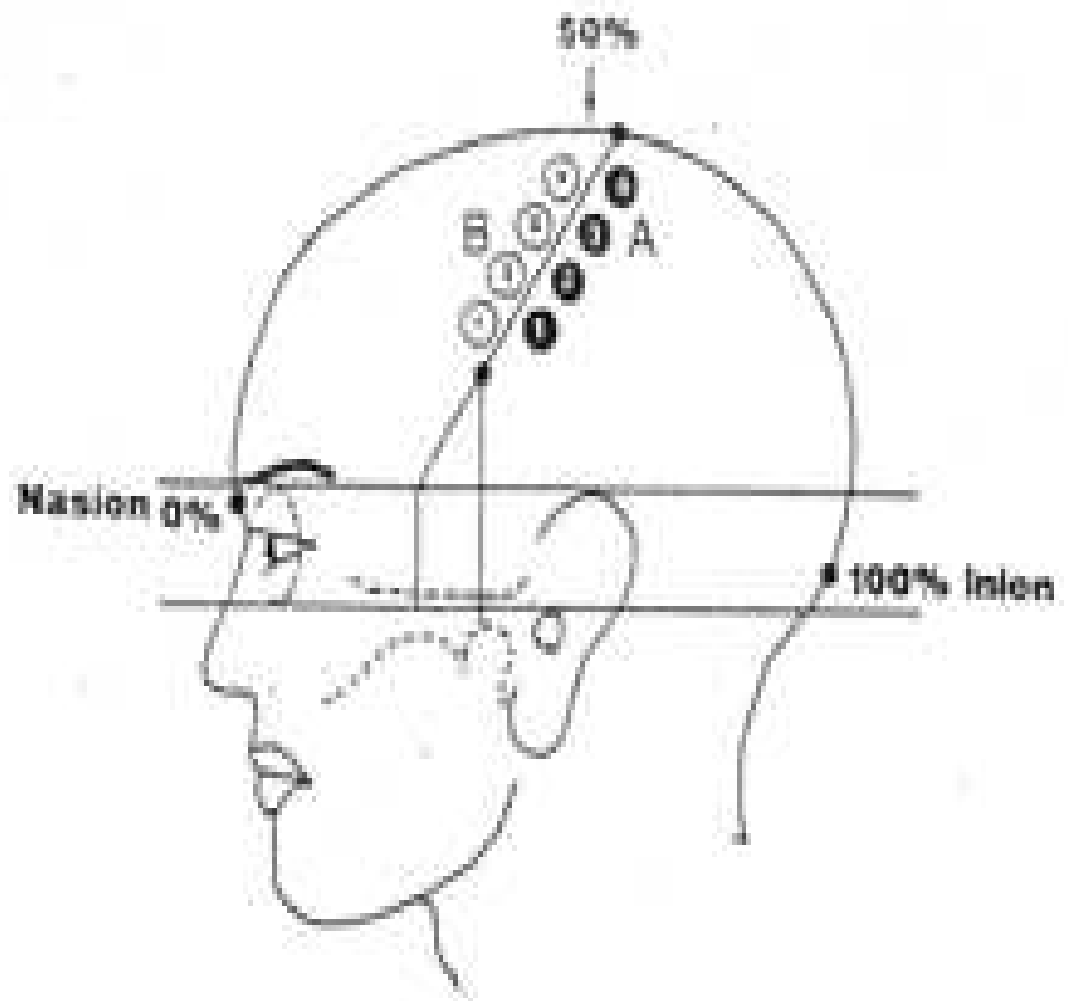
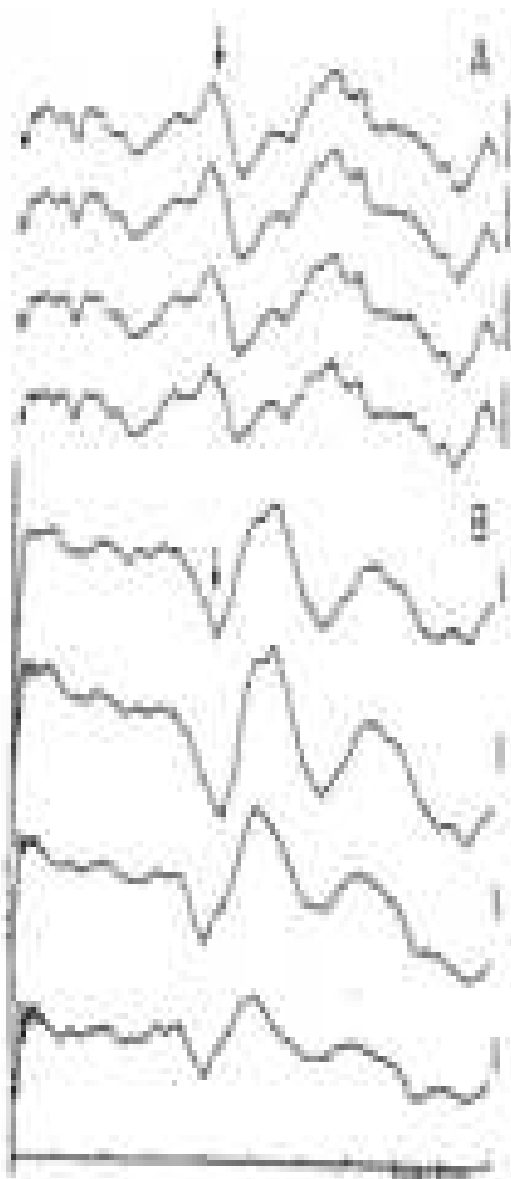
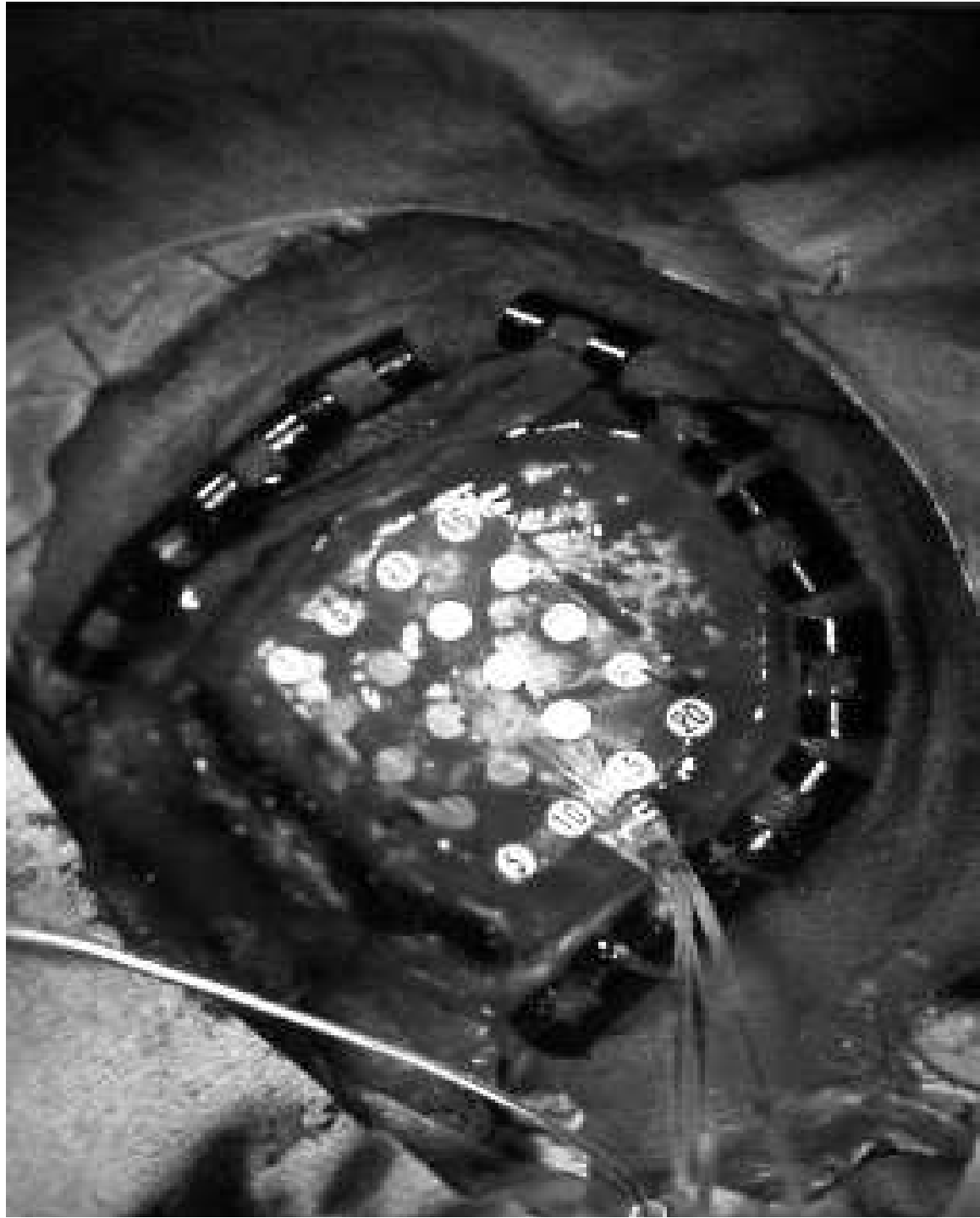
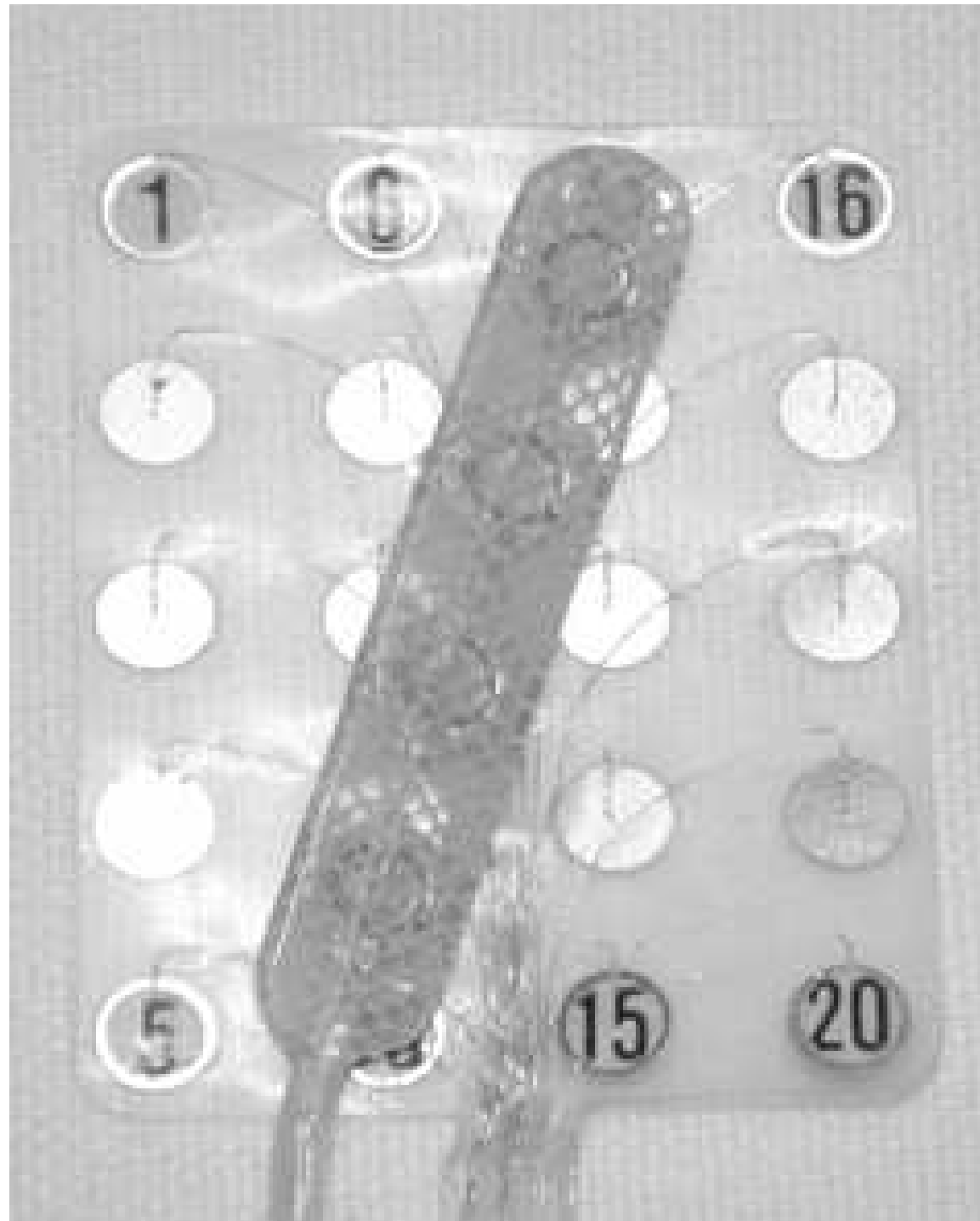


FIG. 205. — Homoculus moteur (d'après PIERRE et RICHUSSON).

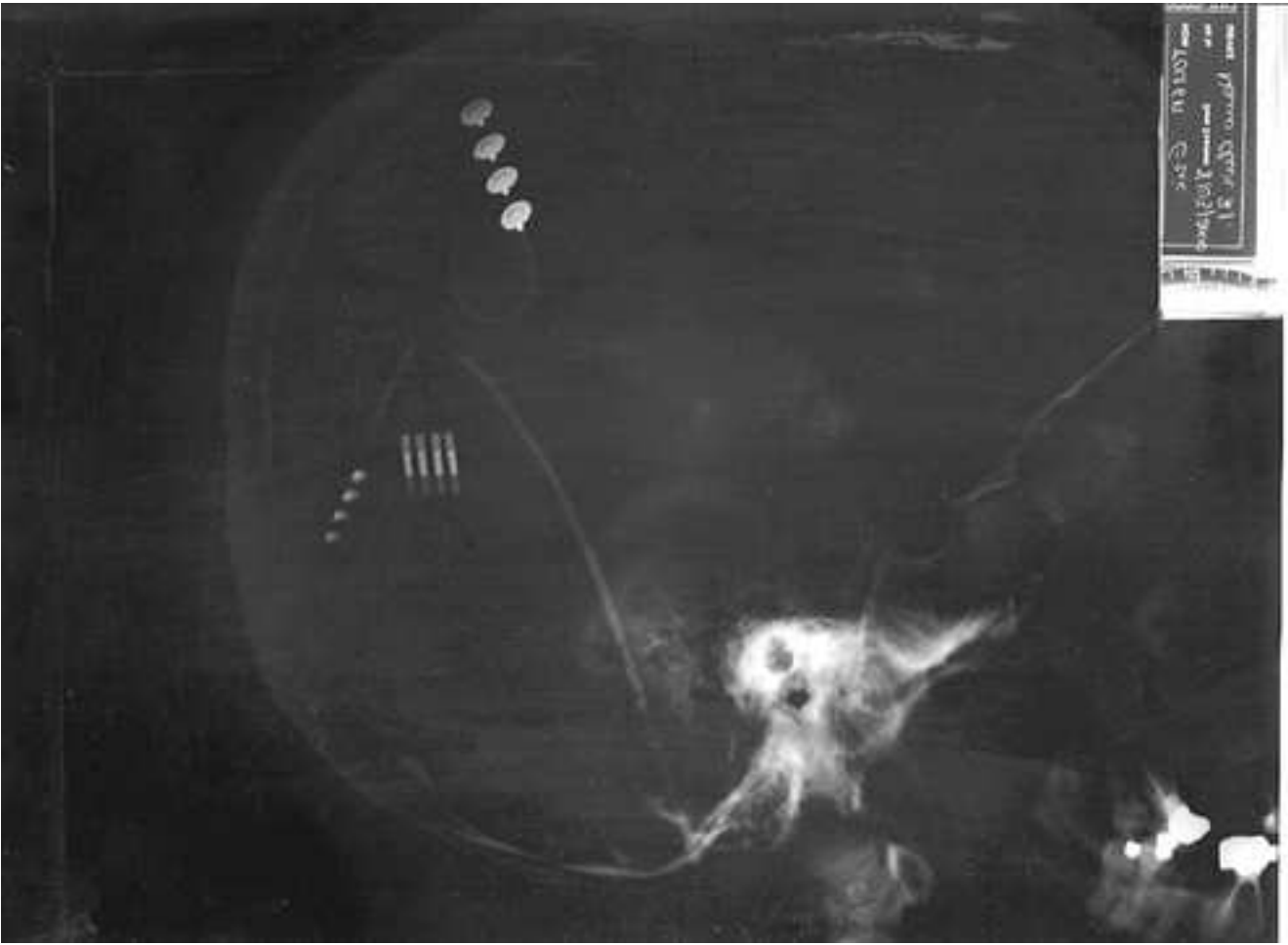


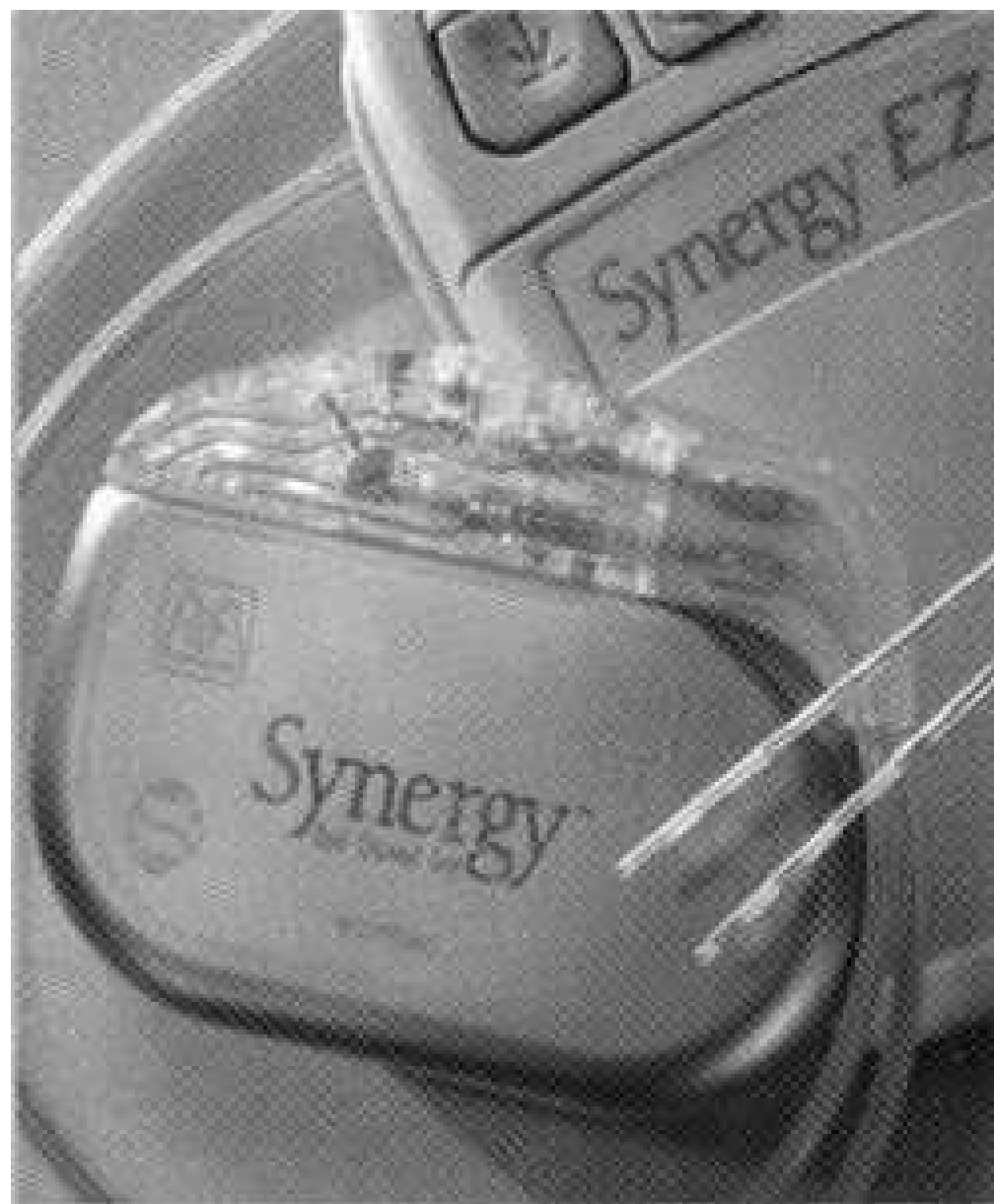


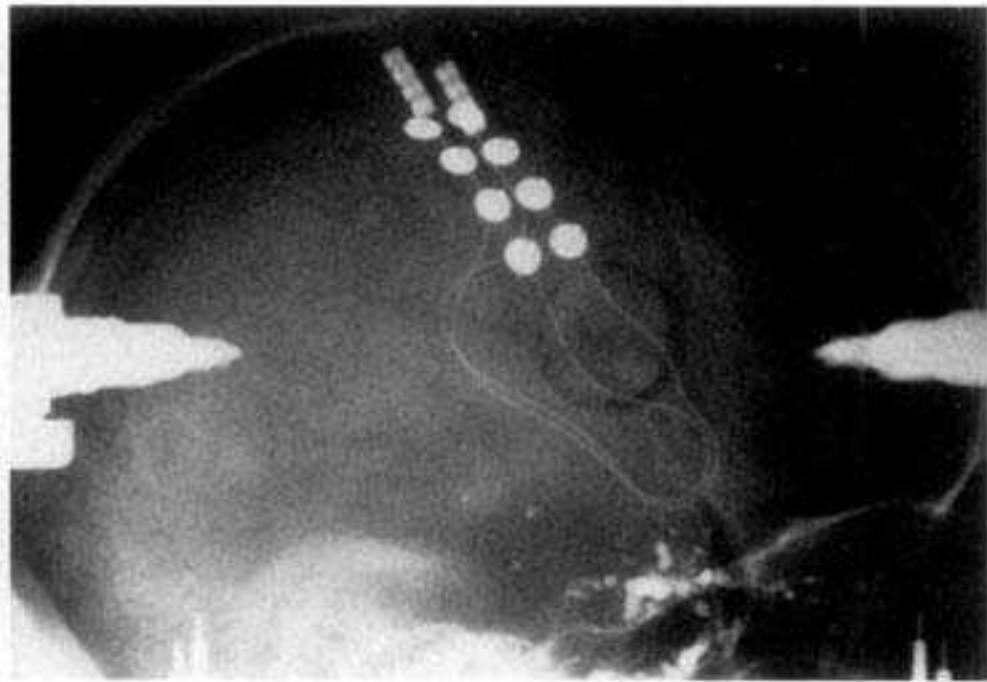
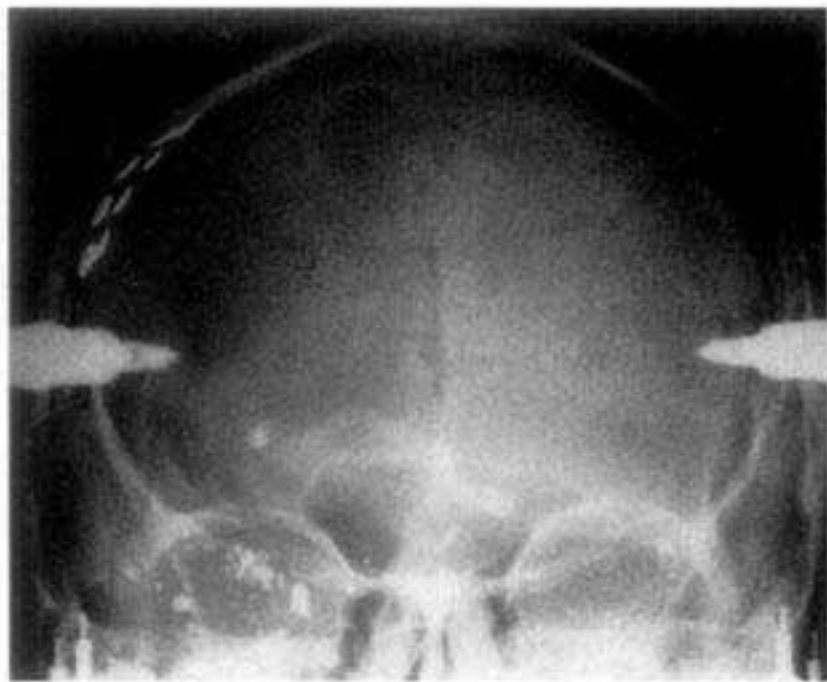






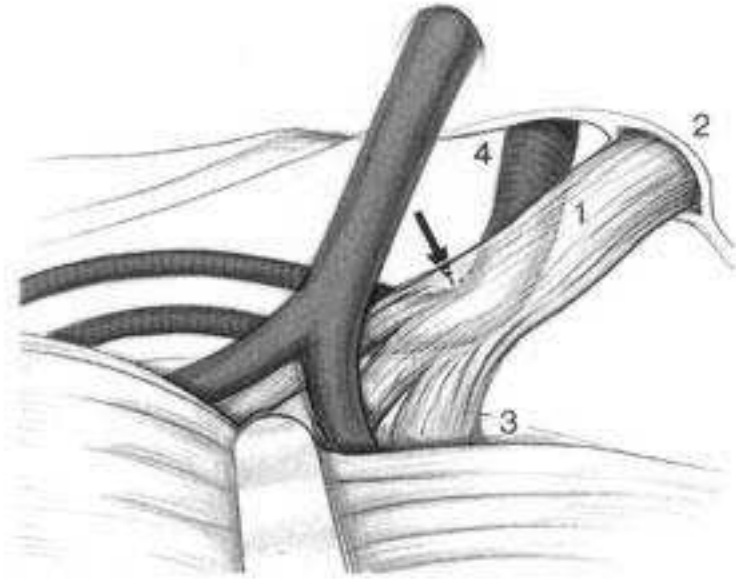




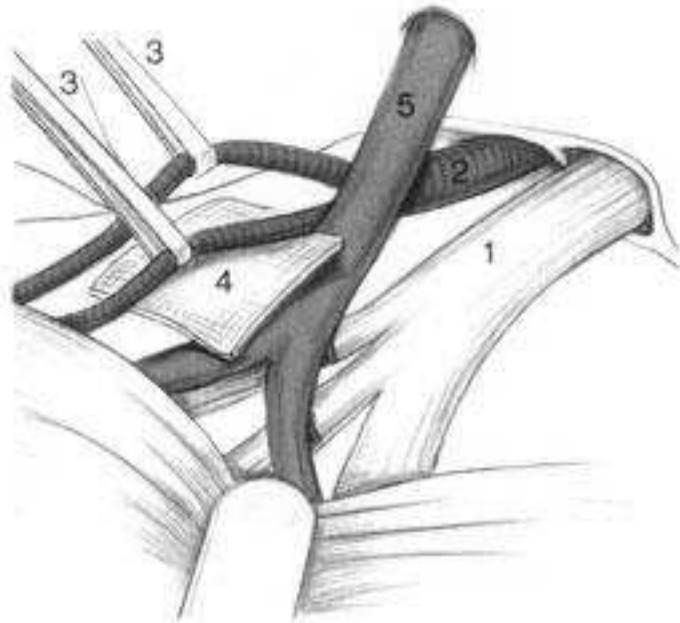


TR. CHIRURGICAL

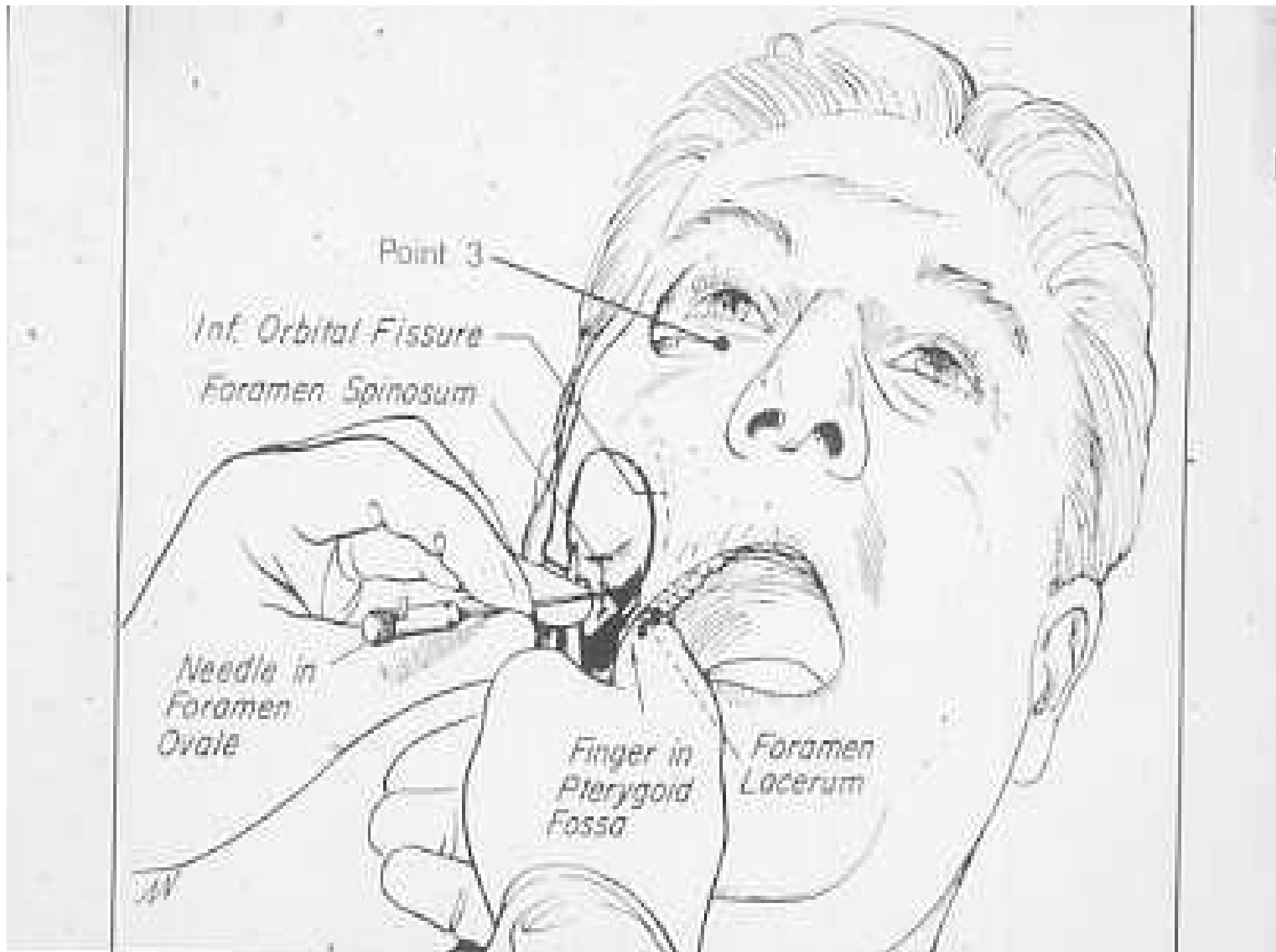
- **Névralgie du trijumeau :**
 - boucle vasculaire(chir.ouverte)
 - RF coag. du Gasser(percutanée)
 - Compression par Fogarty(percutanée)
 - Radiochirurgie(crâne fermé)
- **Névralgie du glosso-pharyngien :**
 - boucle vasculaire
 - RF coag. du ganglion d'Andersh
 - Radiochirurgie



A



B



Point 3

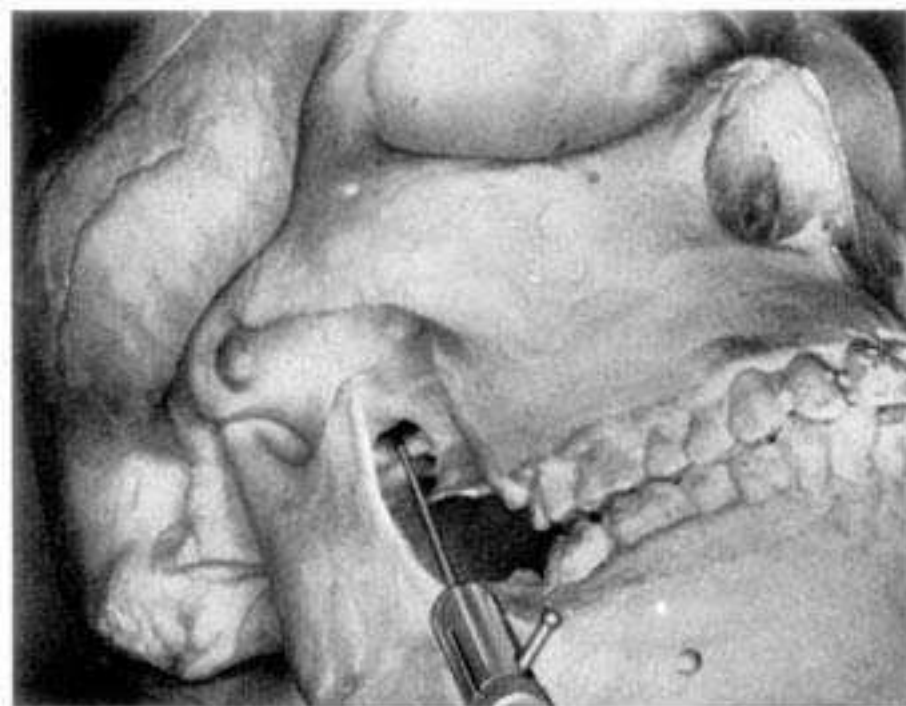
Inf. Orbital Fissure
Foramen Spinosum

Needle in
Foramen
Ovale

Finger in
Pterygoid
Fossa

Foramen
Lacerum

JAV



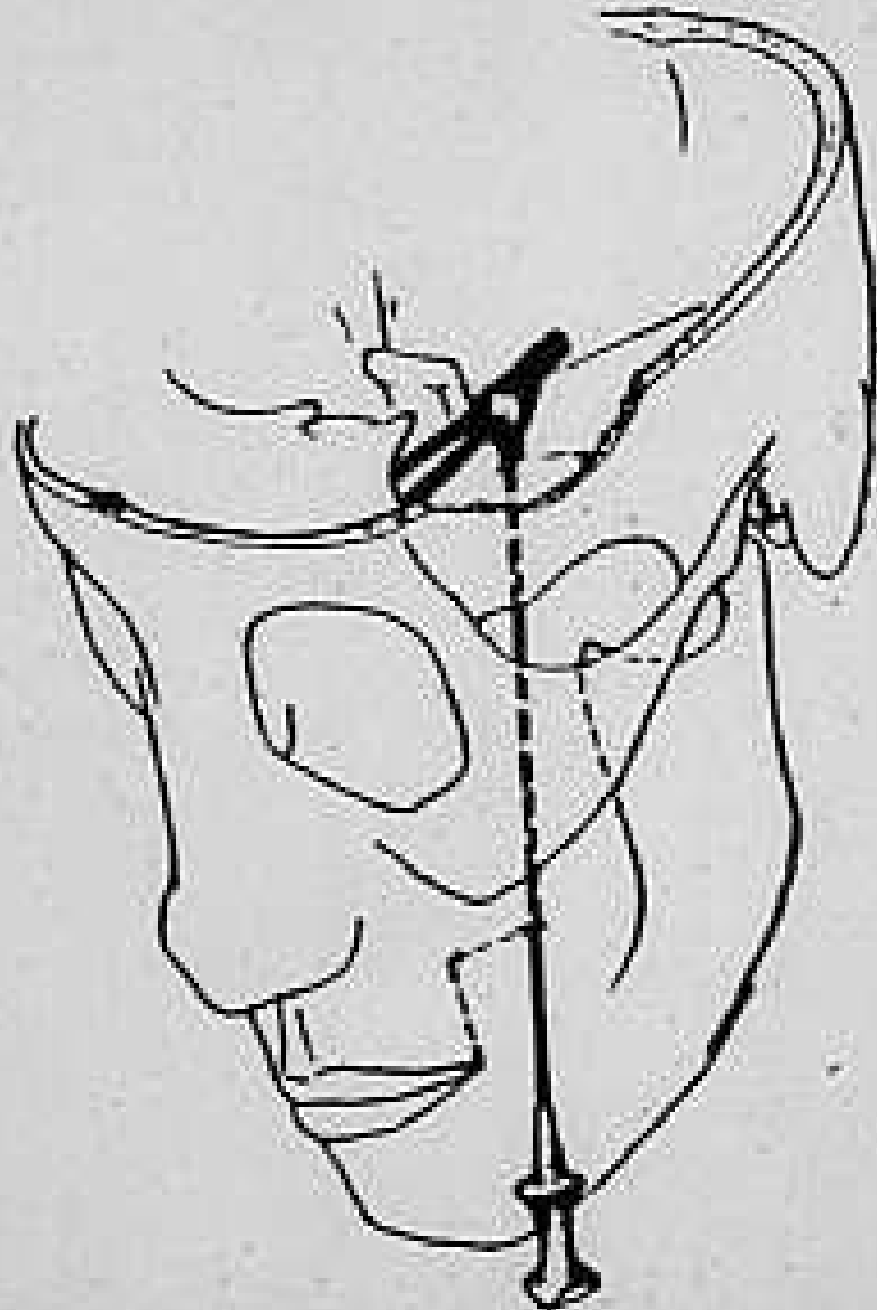
A



B



C



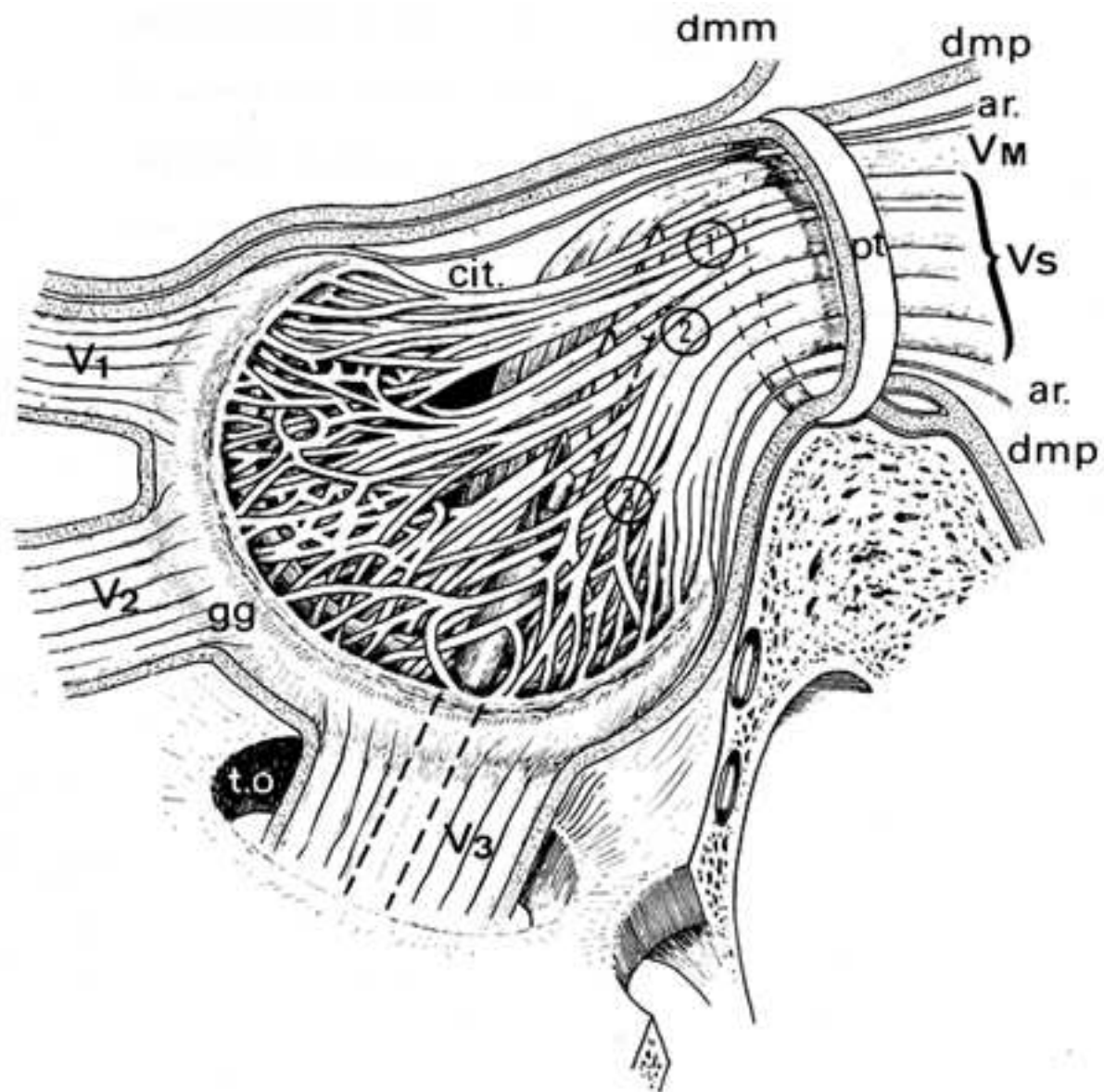
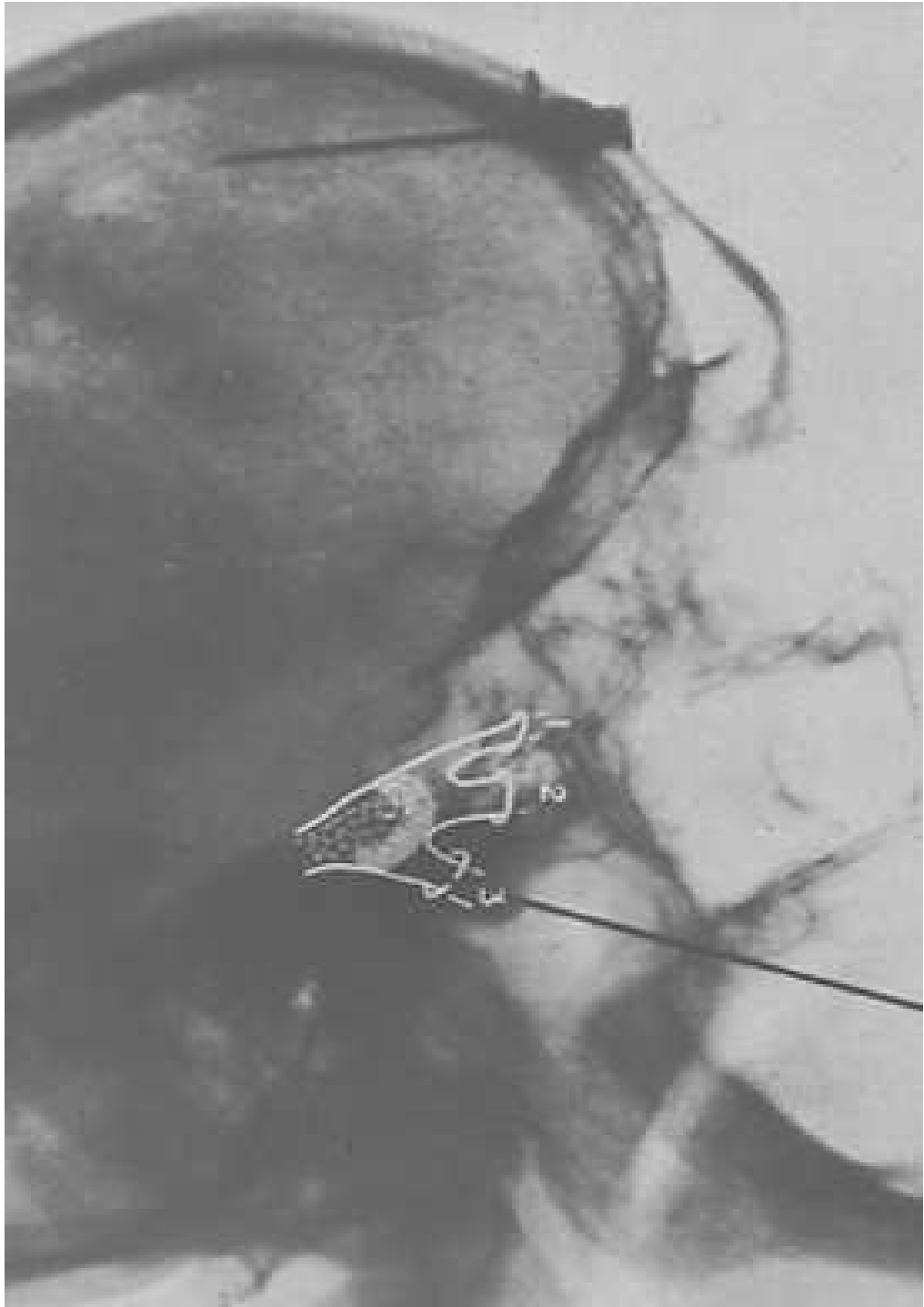


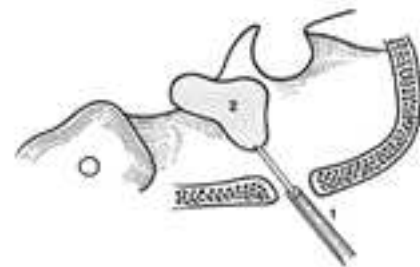
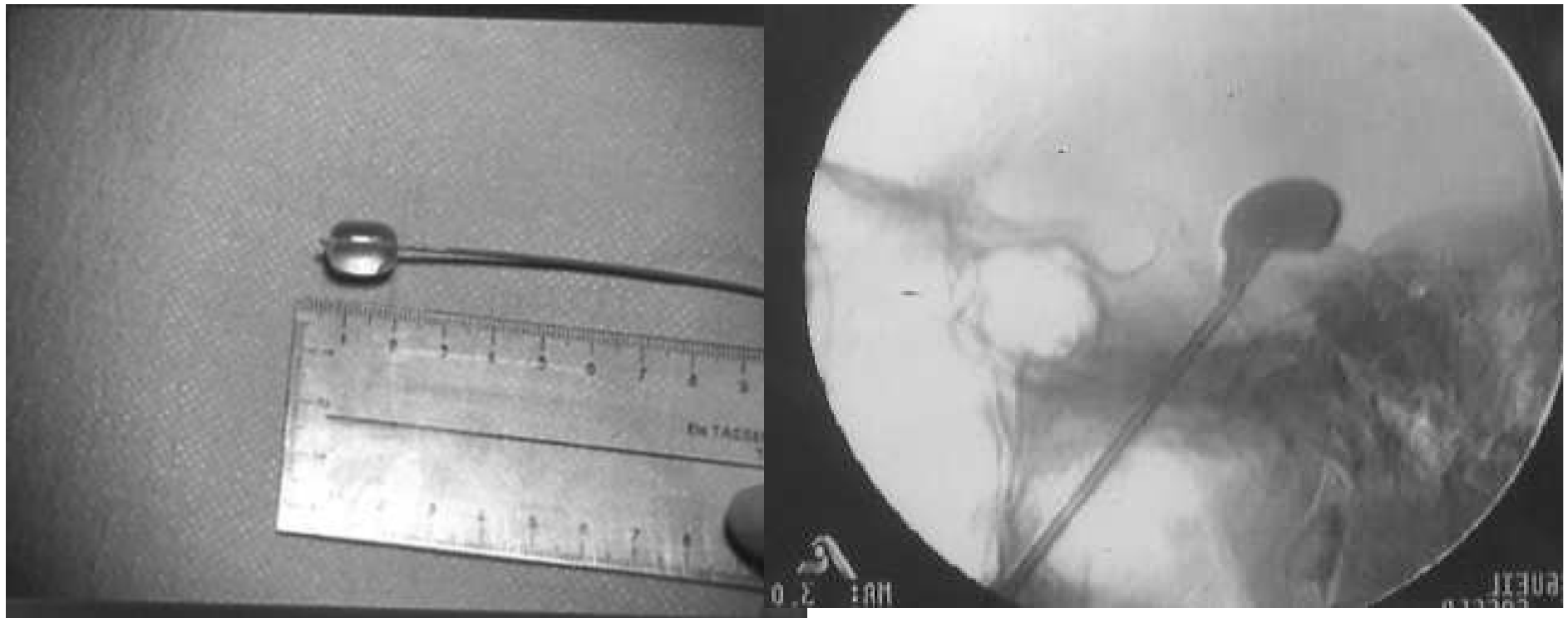
FIG. 3. — Schéma de la technique de coagulation RF du ganglion de Gasser.



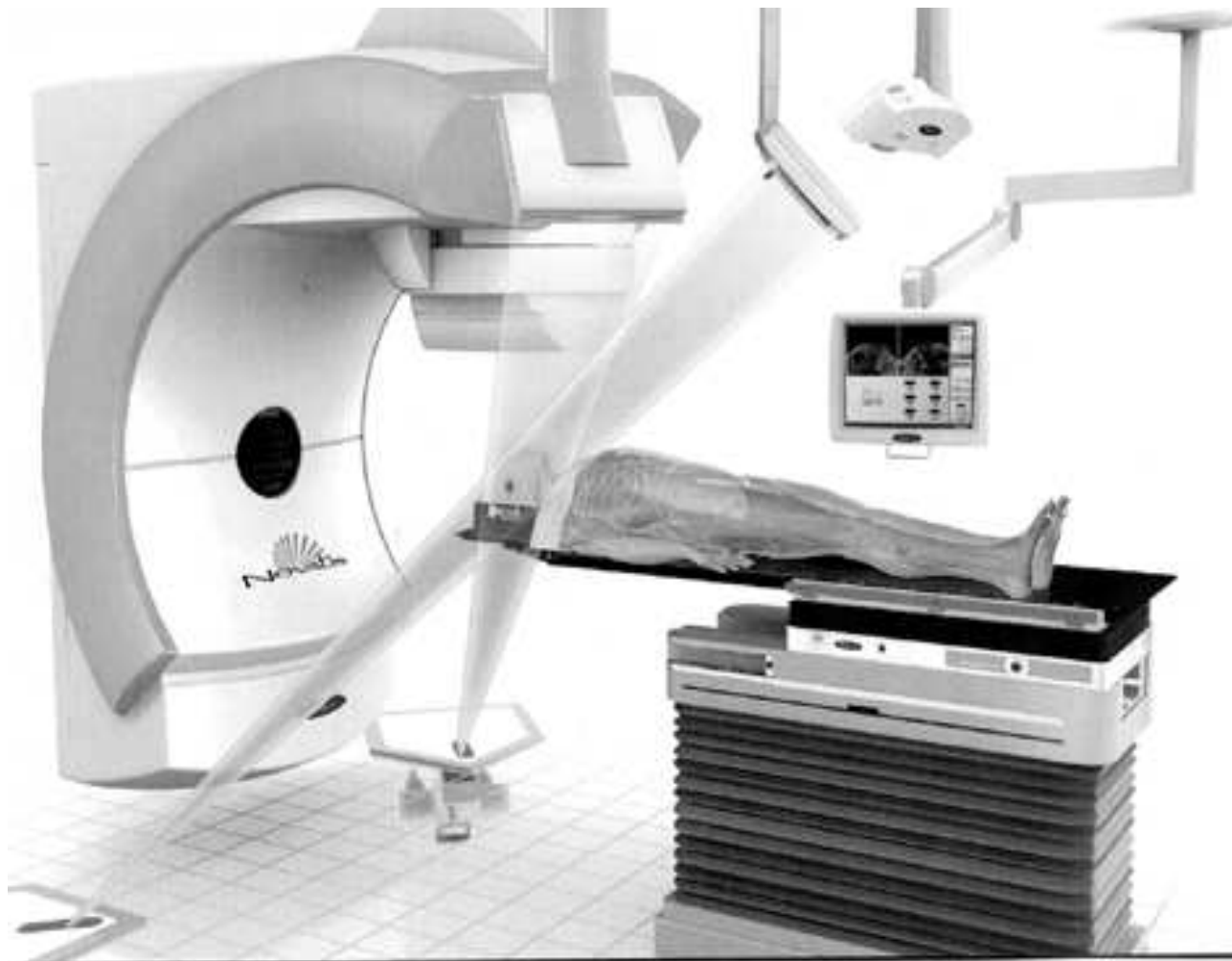
V2

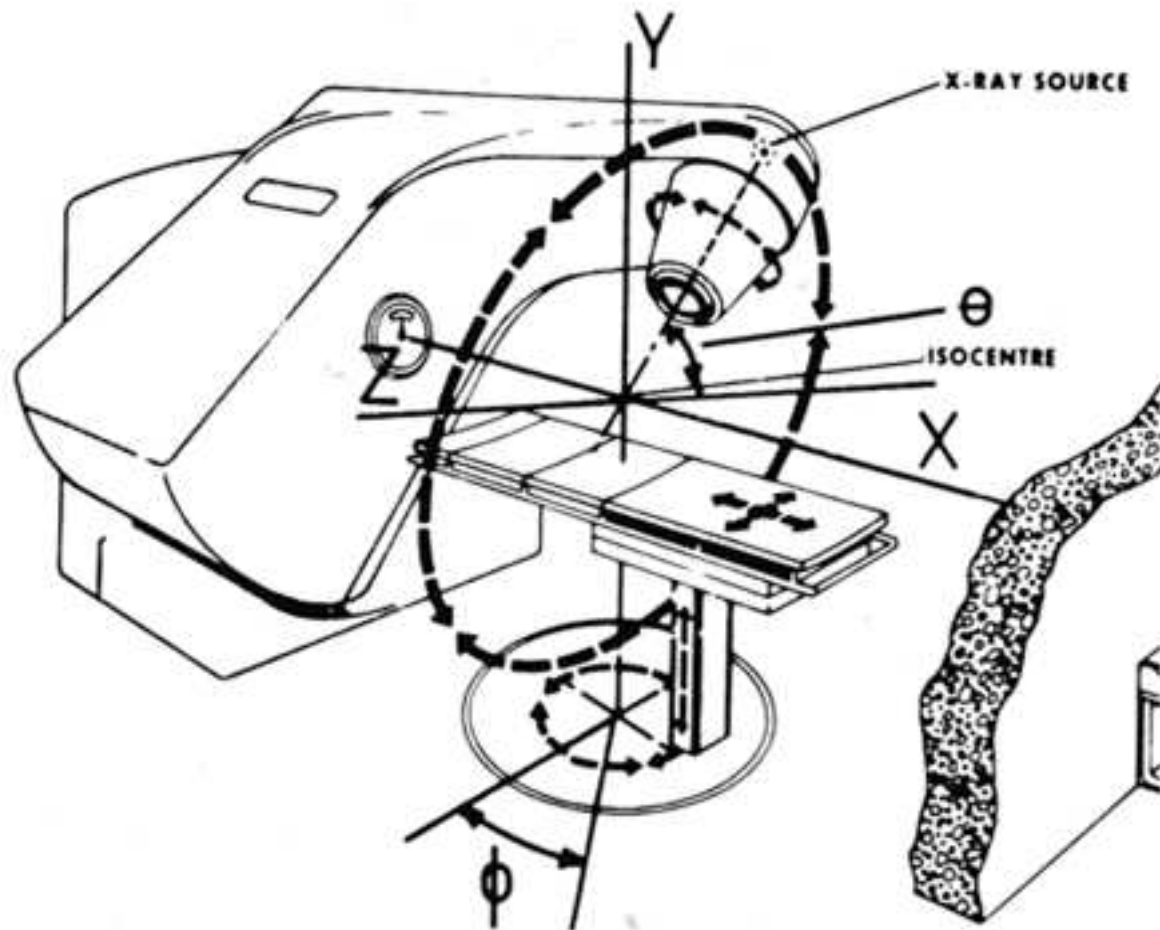


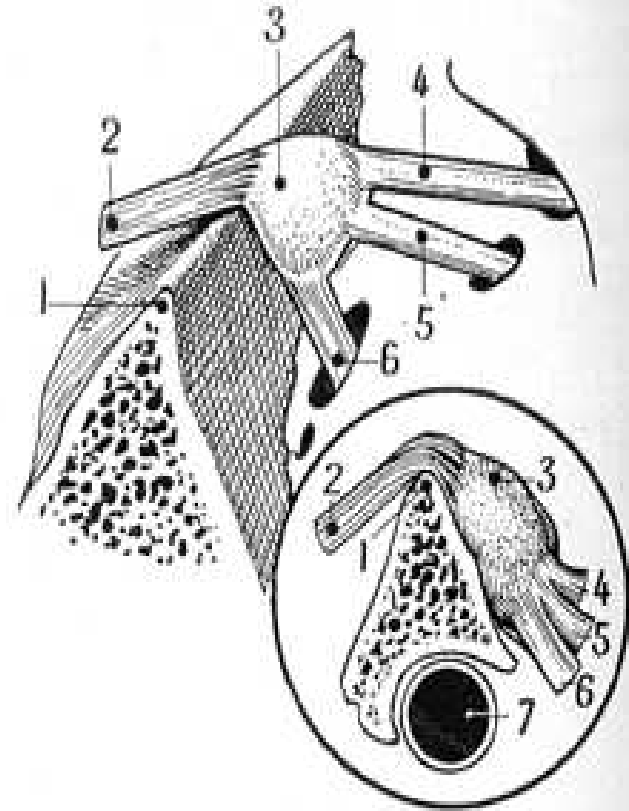
5



1. Cathéter Fogarty n° 4, introduit à travers une aiguille à ponction hépatique
2. Gonflage du ballonnet avec 0,5 – 1,0 ml de contraste iodé pendant une à plusieurs minutes.







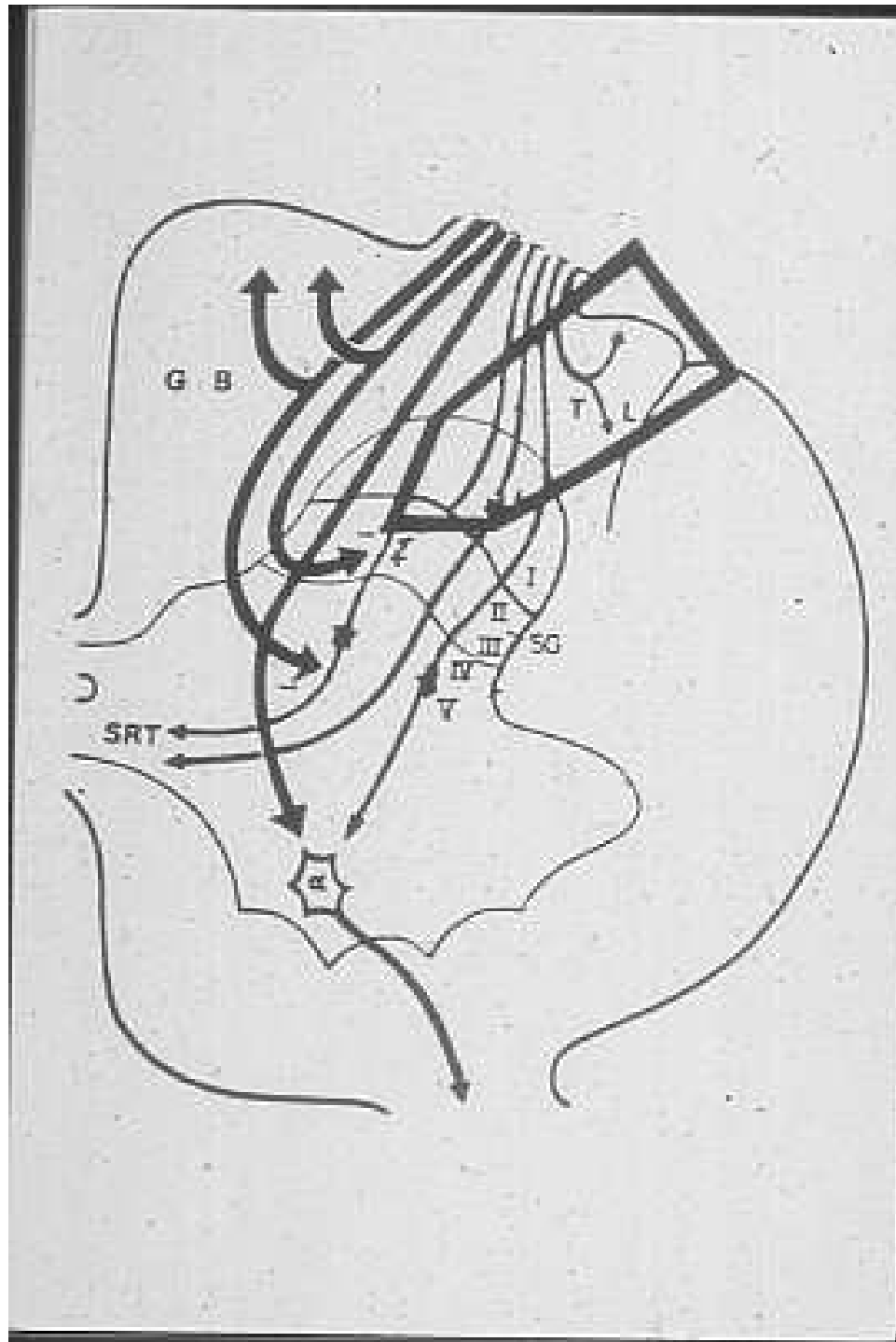
Radiochirurgie Trijumeau

DOSIMETRIE

- **Dose unique**
- **Collimateur conique de 4 à 5 mm**
- **Dose max : 90 Gy (isodose 100%)**
- **Protection du tronc cérébral**
- **Technique: 6 à 8 arcs non coplanaires**

DREZOTOMIE

- Destruction de la tête de la corne post. de la moelle épinière
- Indications:
 - douleurs du plexus brachial
 - syndrome d'étage médullaire
 - douleurs neuro.périphériques
 - agit sur les composantes :
 - = allodyniques
 - = hyperalgésiques



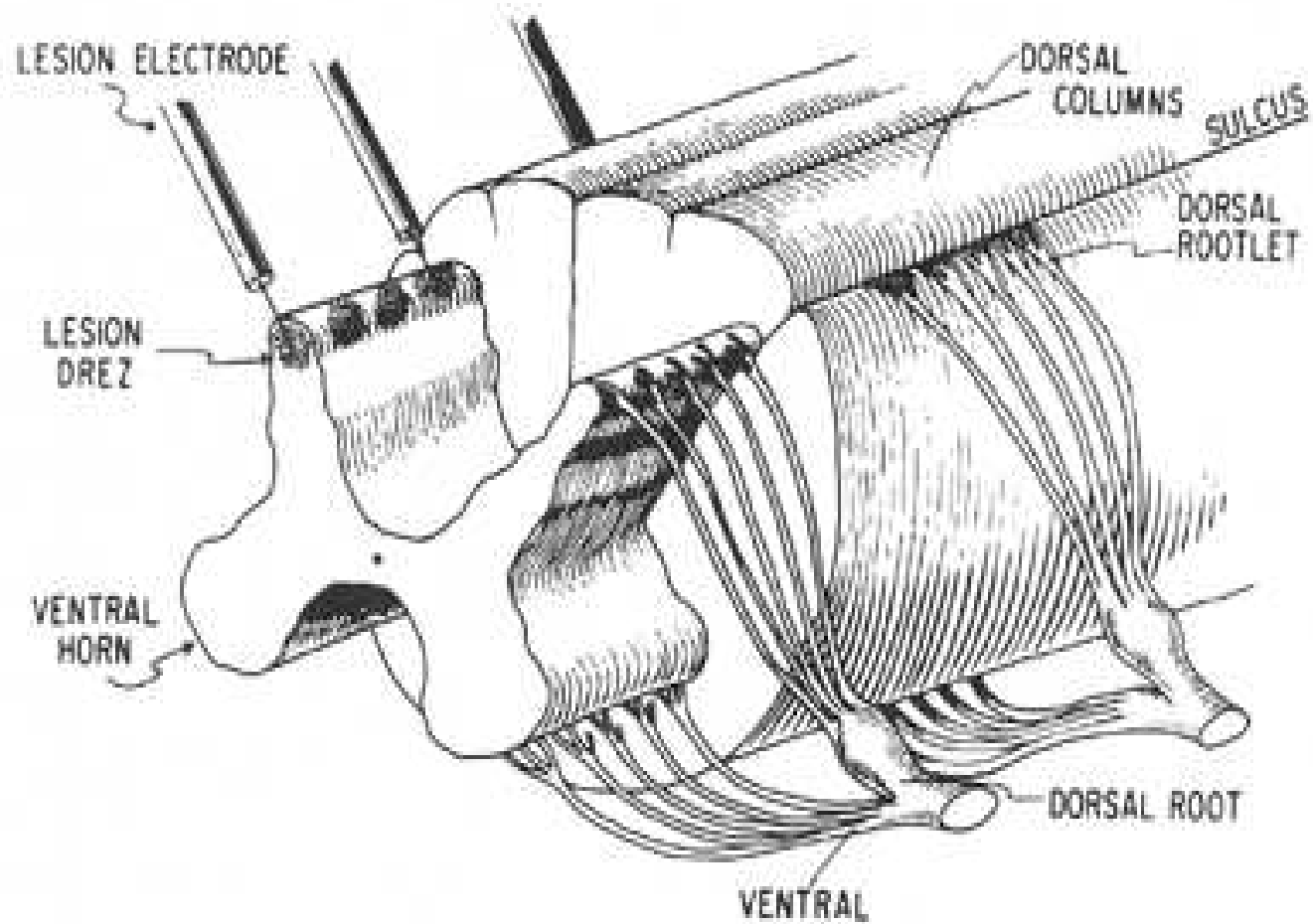


FIG. 1. Schematic drawing of cross-section of spinal cord showing areas of lesion in the DREZ.

PHARMACOTHERAPIE INTRATHECALE

- Pompe programmable ou non implantée
- Médicaments:
 - morphine
 - baclofène
 - clonidine – anesthésiques locaux
 - anti NMDA
 - Ziconotide (Prialt*)







