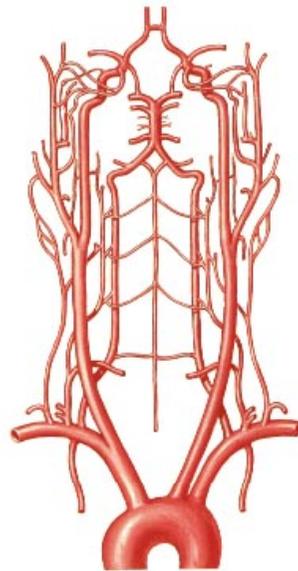


Eco-dopplersonografia dei vasi cerebro-afferenti e Doppler Transcranico

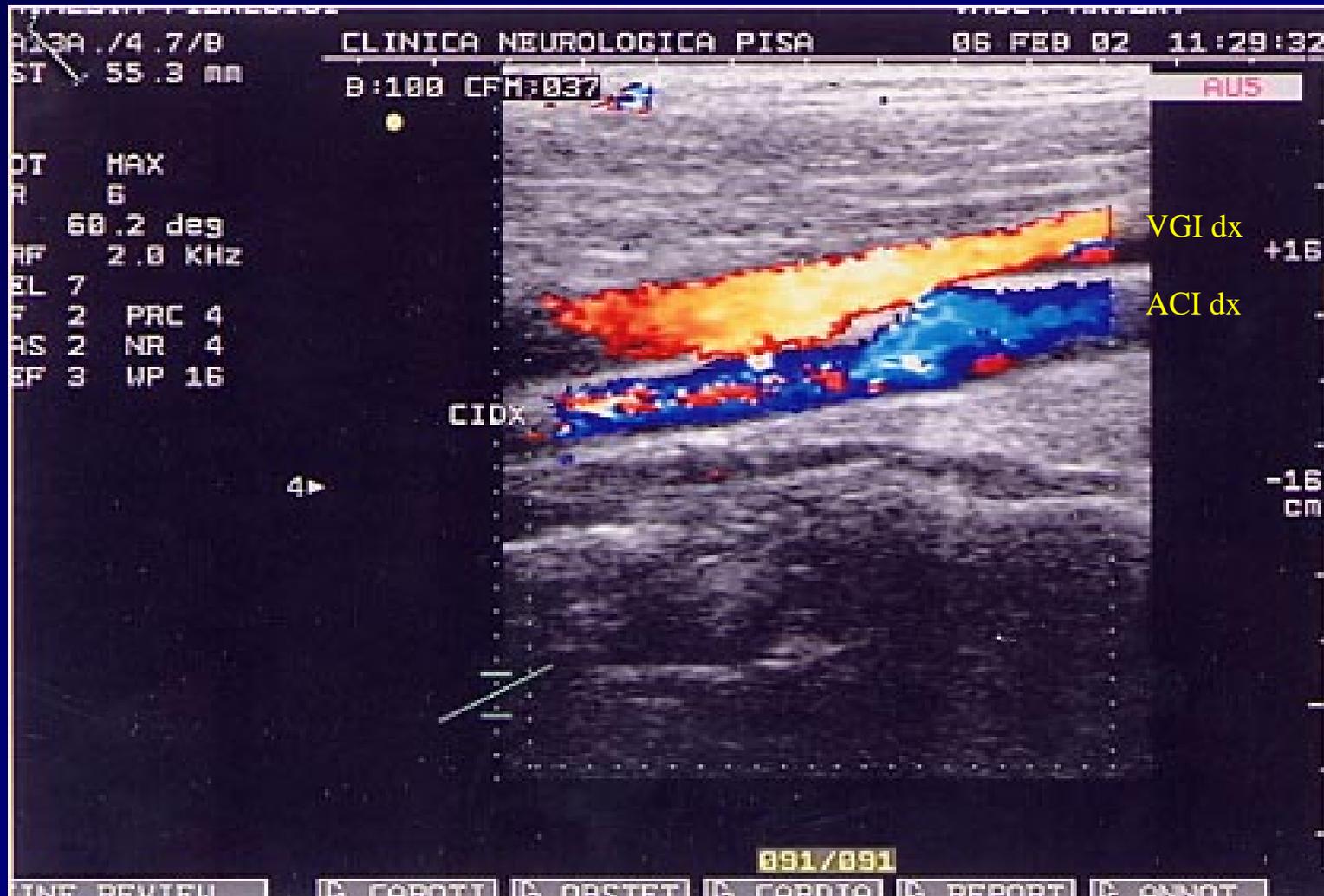
www.fisiokinesiterapia.biz

Arteries to Brain
Schema



F. Natta
M.D.
© Novartis

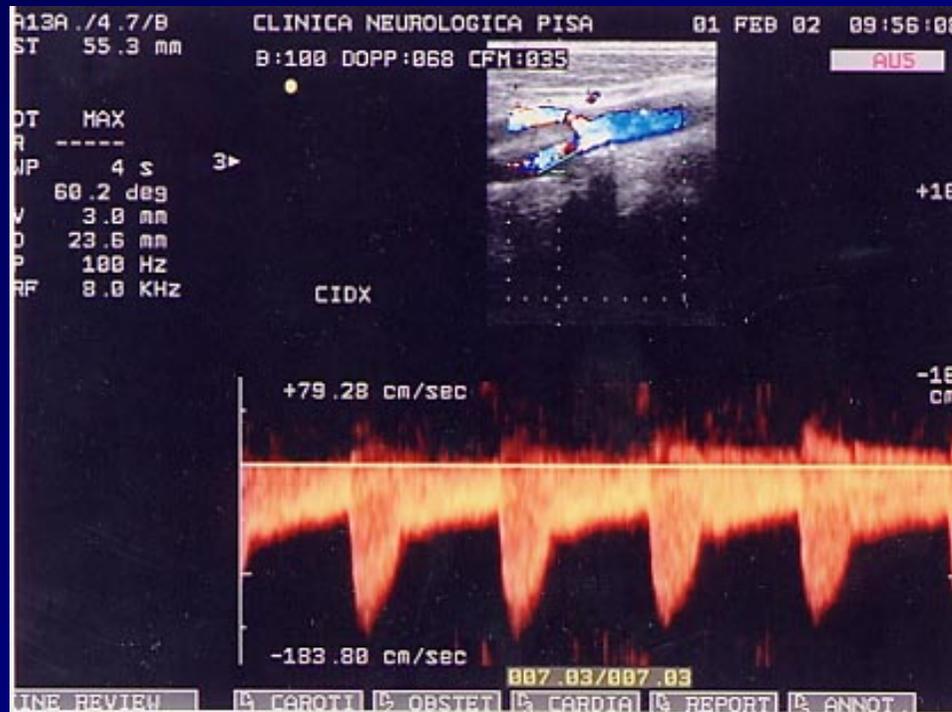
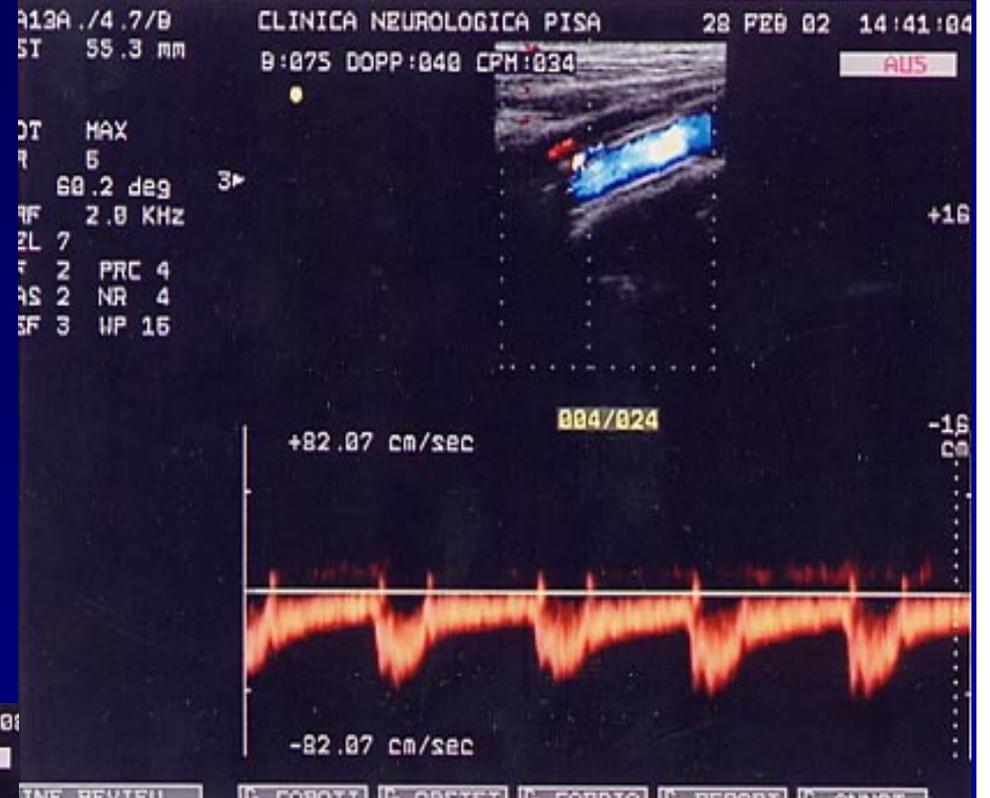
CAROTIDE INTERNA E VENA GIUGULARE INTERNA



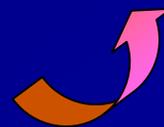
BIFORCAZIONE CAROTIDEA



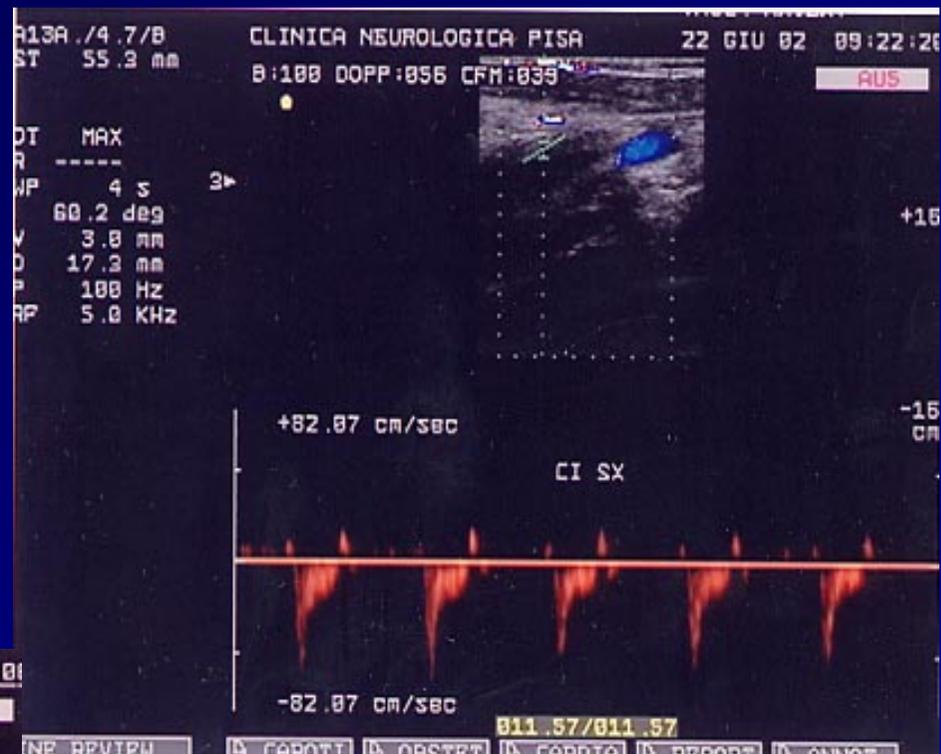
CAROTIDE INTERNA: REPERTO NORMALE



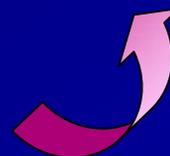
CAROTIDE INTERNA: STENOSI (ACCELERAZIONE DI FLUSSO)



CAROTIDE INTERNA: REPERTO DI OCCLUSIONE



CAROTIDE INTERNA: ANOMALIA DI DECORSO



DOPPLER TRANSCRANICO



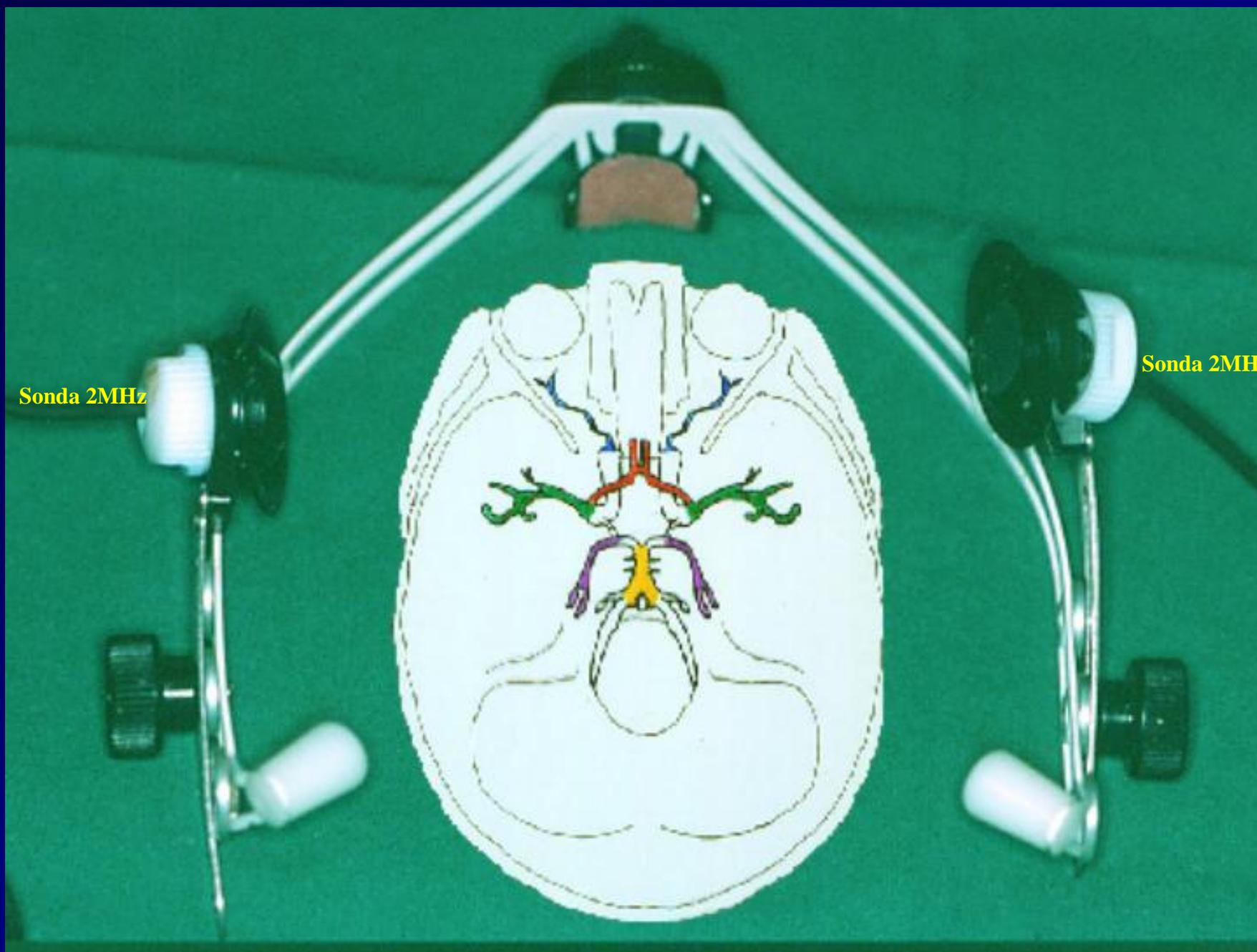
EVENTI EMODINAMICI

- STENOSI INTRACRANICHE
- CIRCOLI DI COMPENSO
- RISERVA VASOMOTORIA

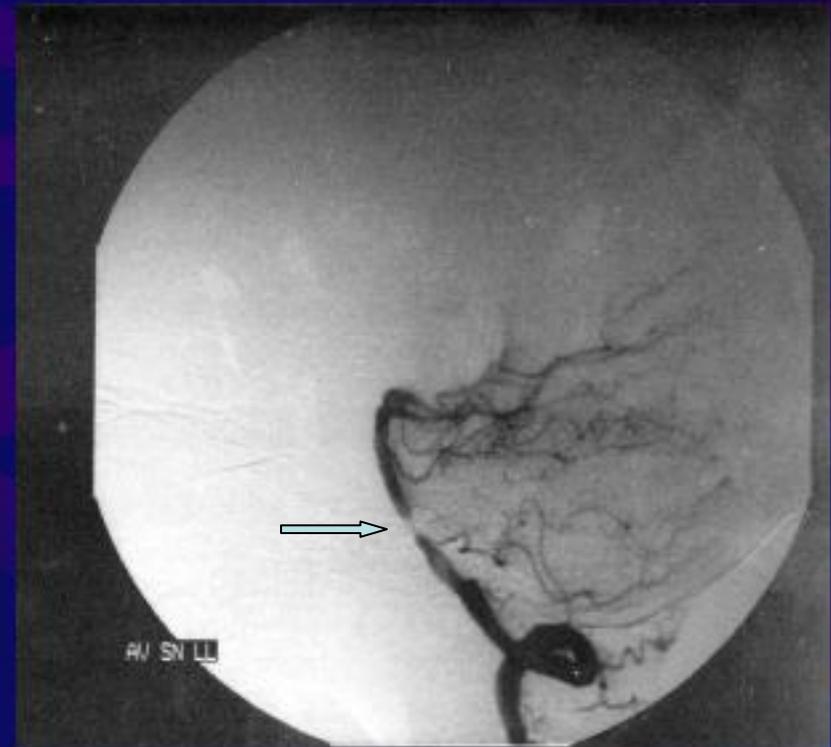
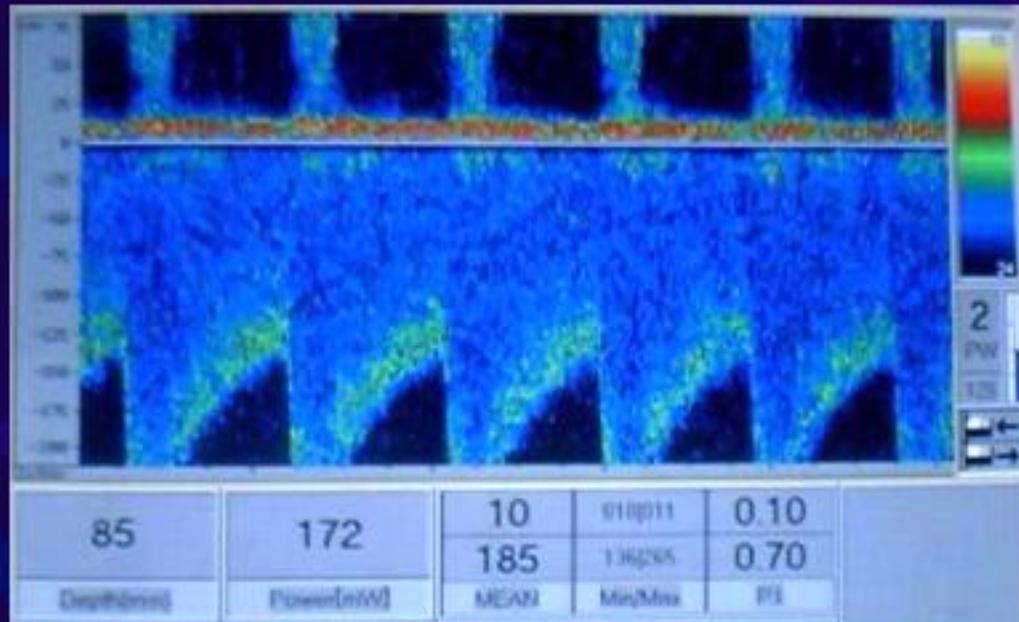
EVENTI EMBOLICI

- STENOSI CAROTIDEA
 - CARDIOEMBOLIA
 - EMBOLIA PARADOSSA
-
- ANGIOPLASTICA E STENTING
 - ENDOARTERECTOMIA

Supporto per monitoraggio Doppler Trans-cranico

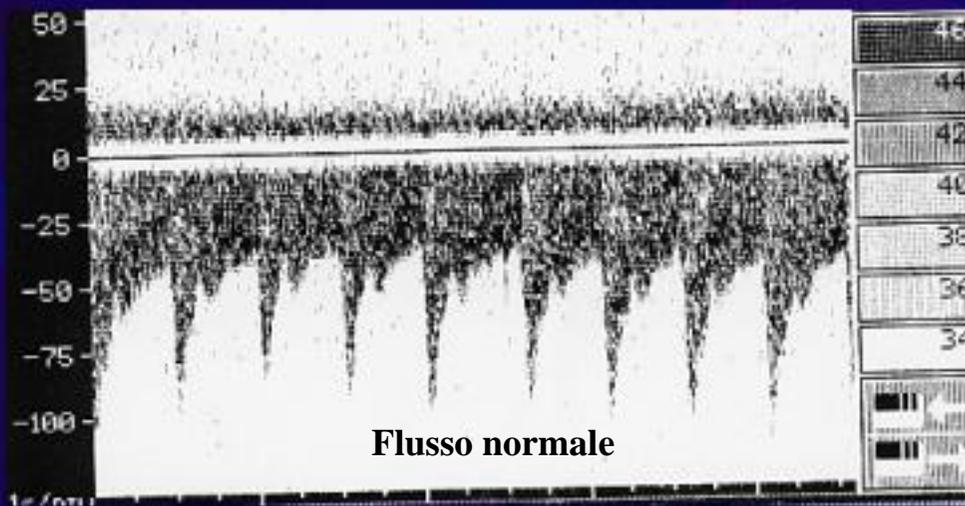
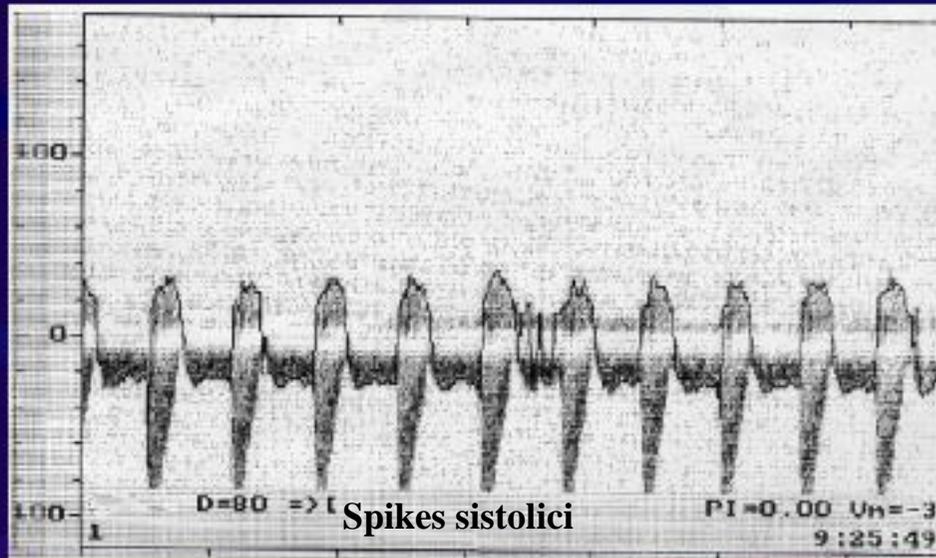


STENOSI ARTERIA BASILARE

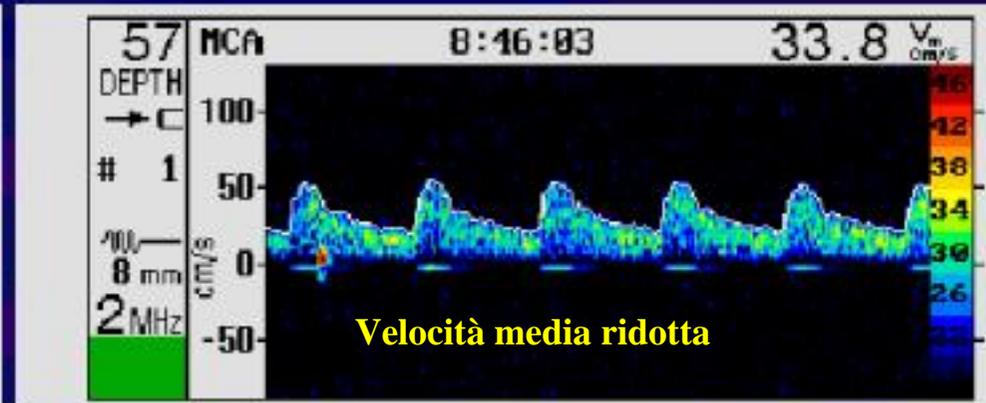
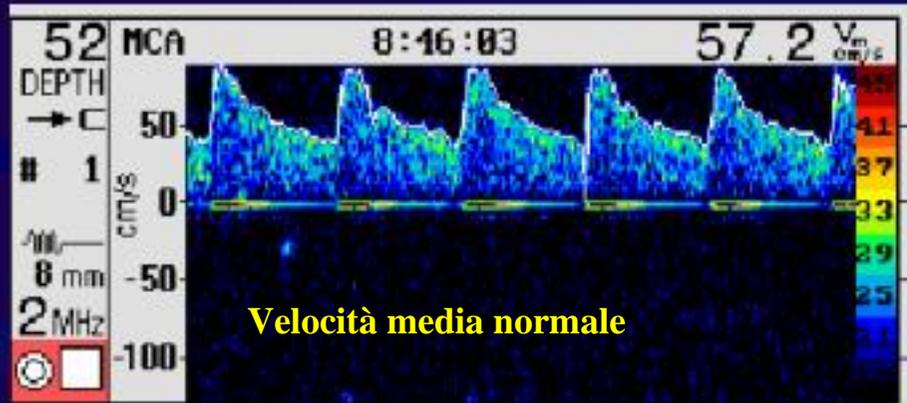


Si noti l'accelerazione di flusso (circa 185 cm/sec), rilevata al doppler trans-cranico alla finestra sub-occipitale

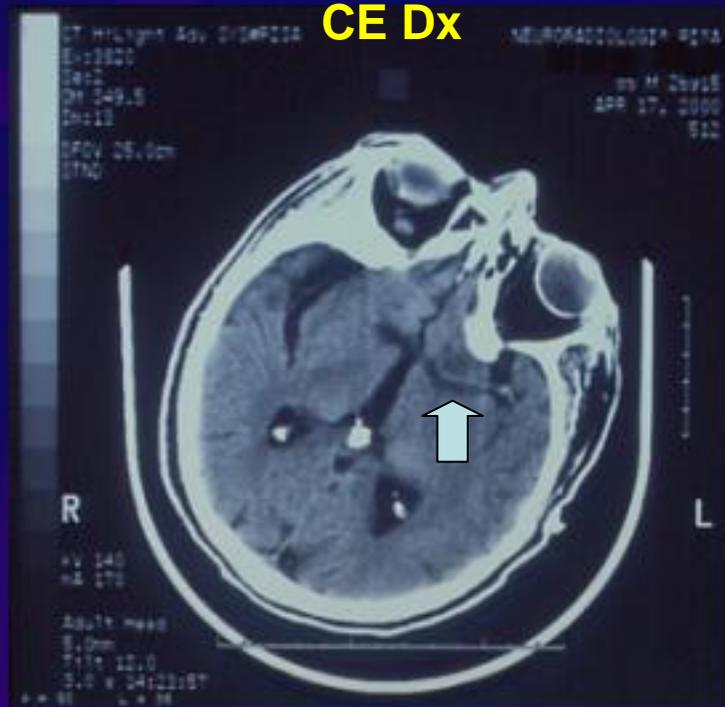
OCCLUSIONE E RICANALIZZAZIONE ARTERIA BASILARE



OCCLUSIONE ARTERIA CEREBRALE MEDIA

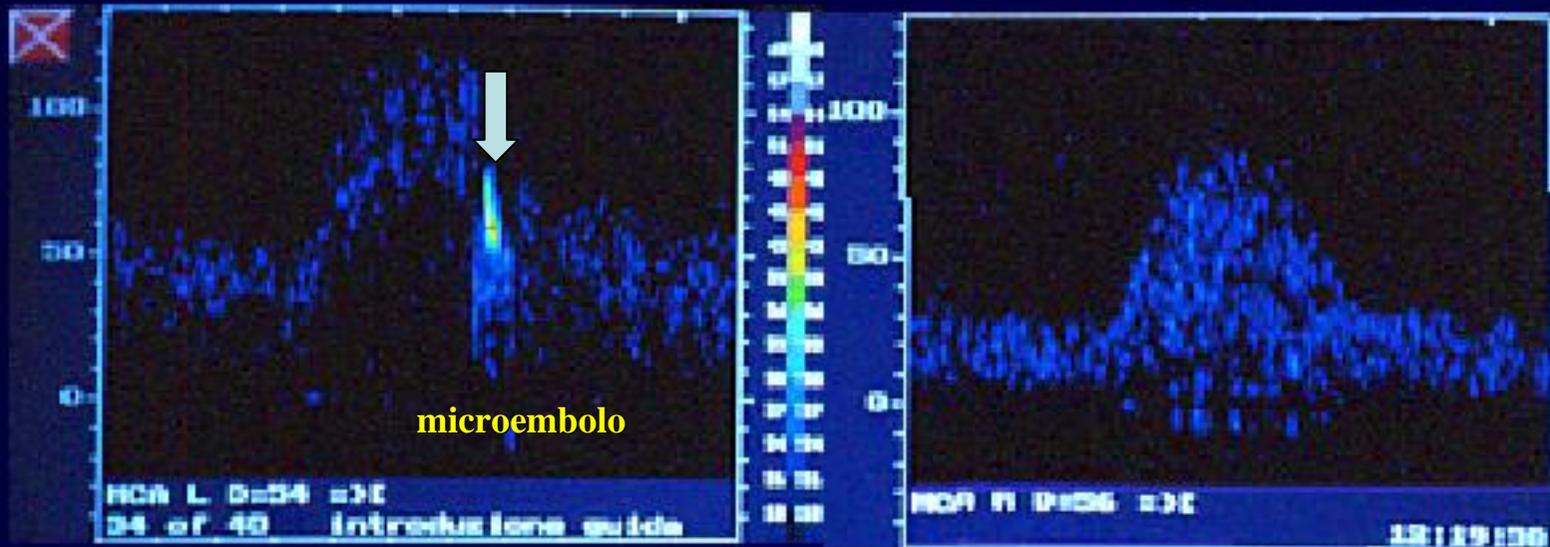
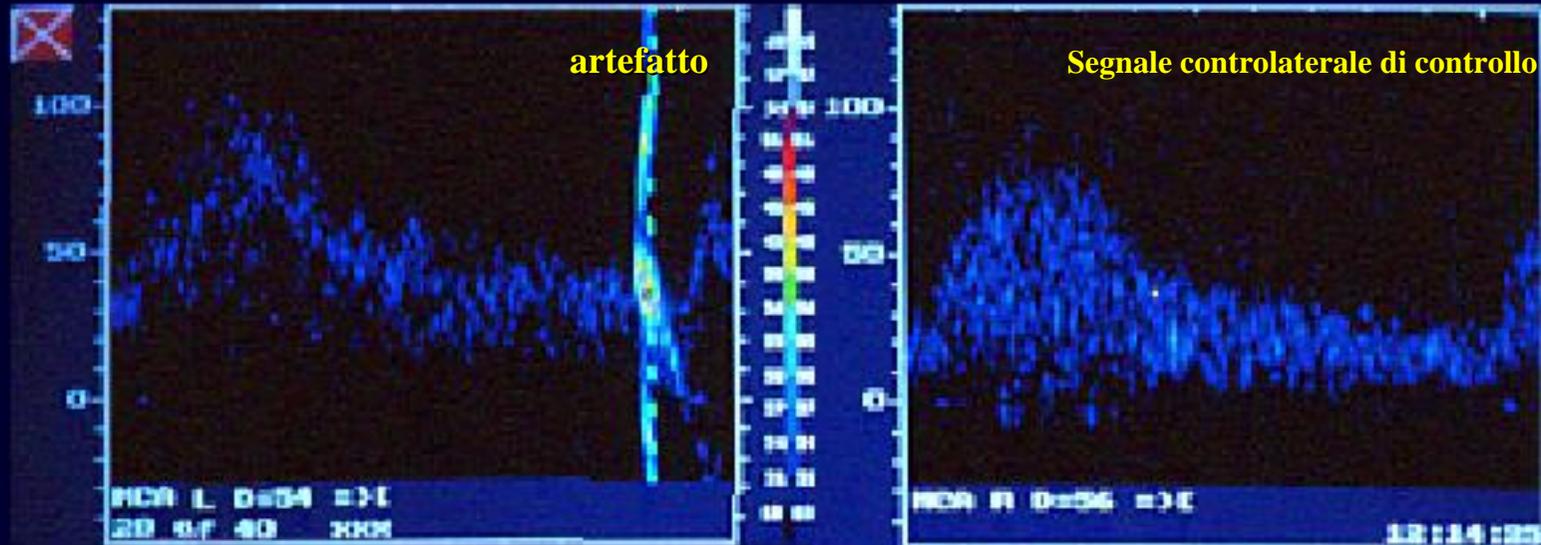


CE Dx

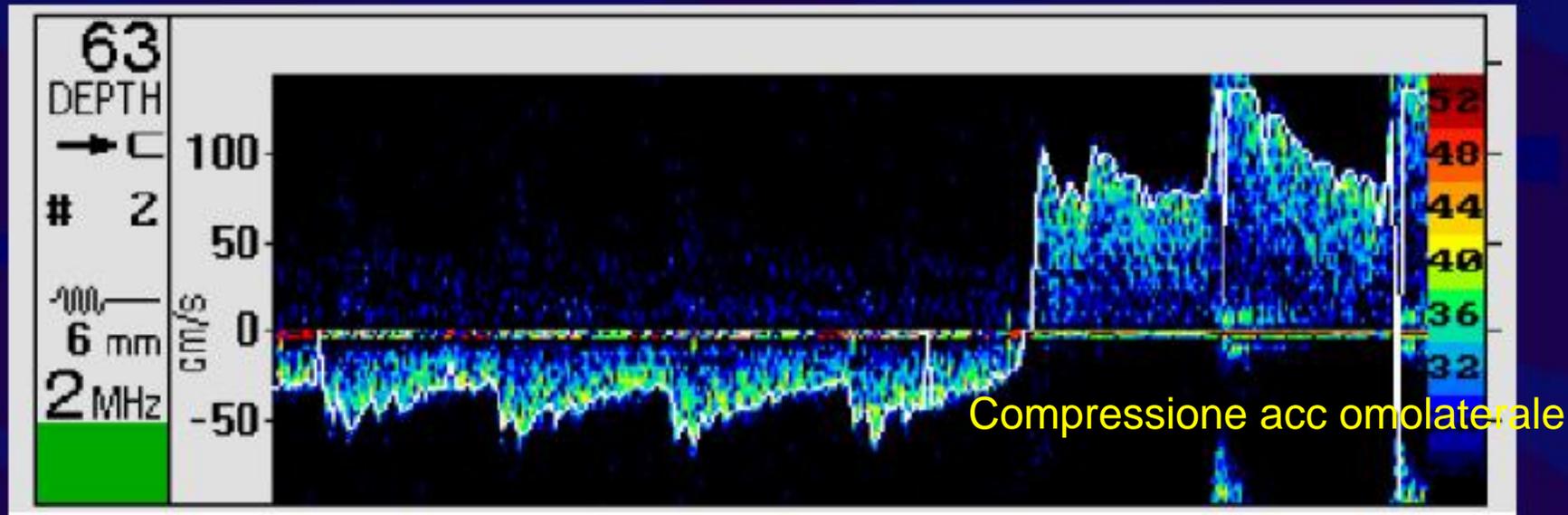


Iperdensità dell'a. cerebrale media di sn, indicativa di occlusione trombotica.

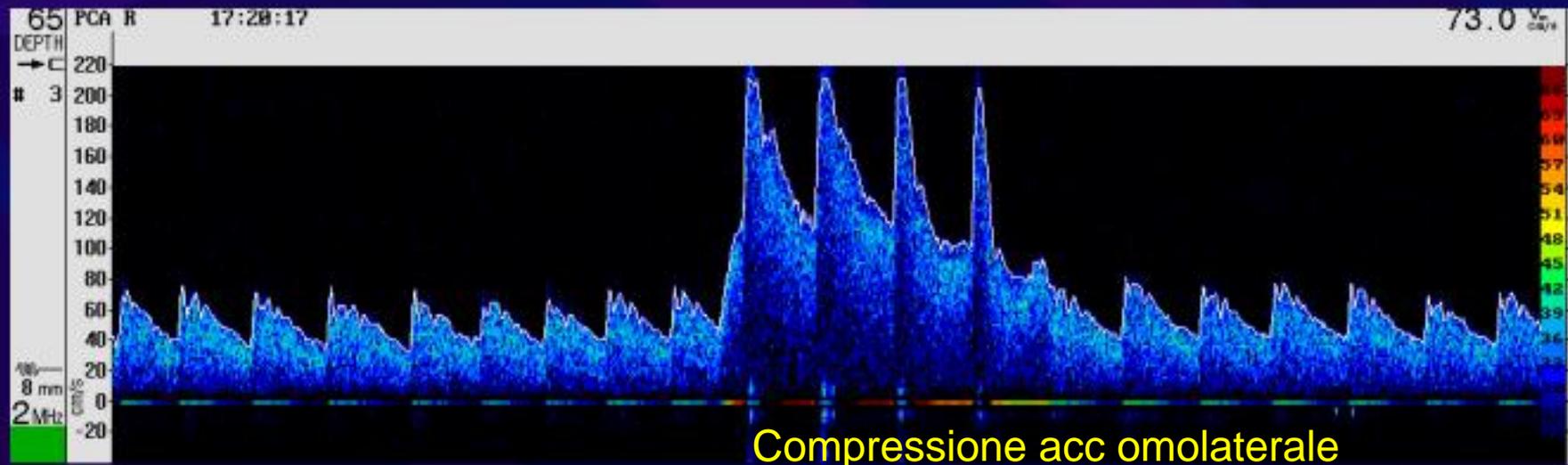
TRANSCRANIAL DOPPLER EMBOLI DETECTION



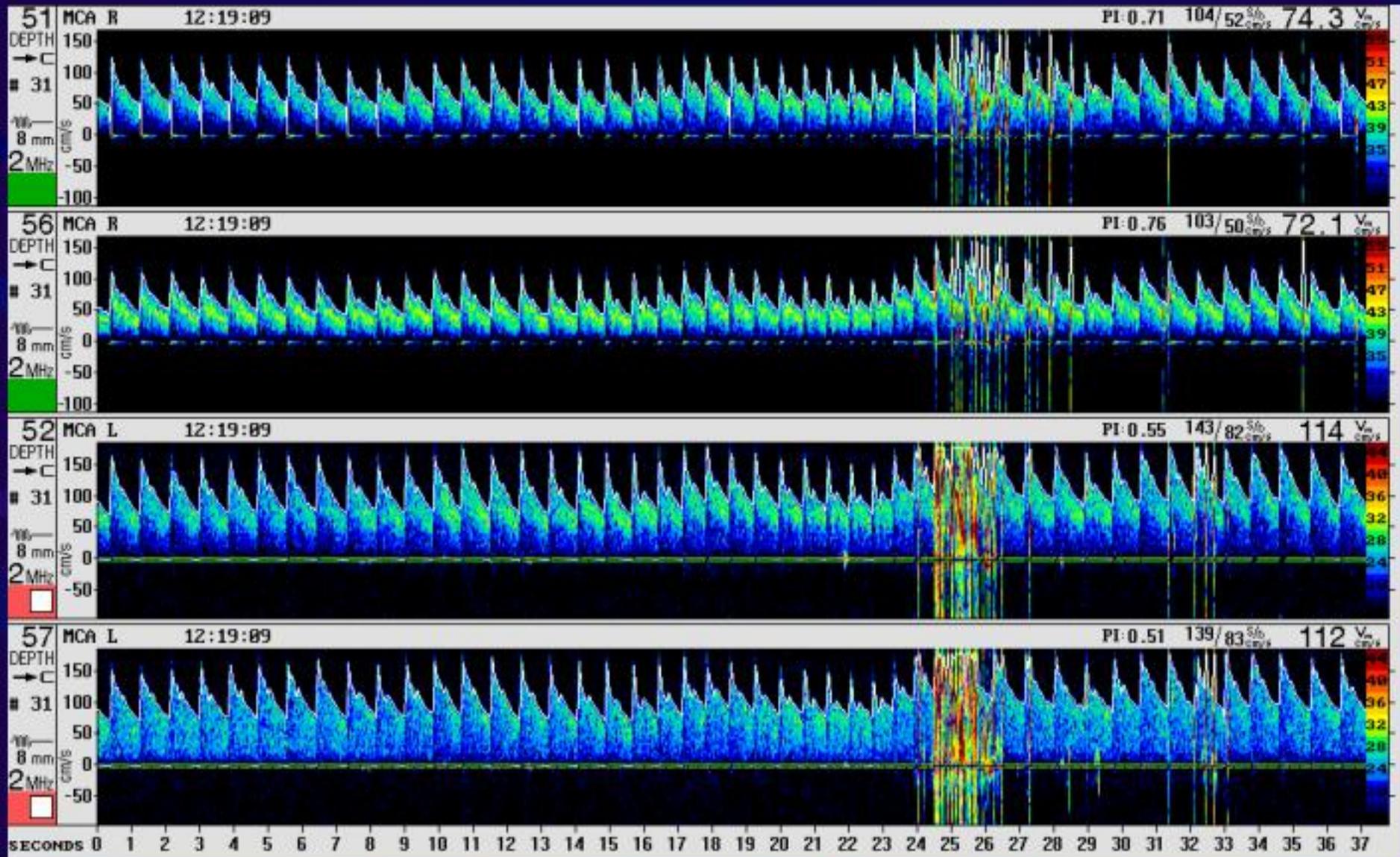
PERVIETA' ARTERIA COMUNICANTE ANTERIORE



PERVIETA' ARTERIA COMUNICANTE POSTERIORE



EMBOLIA PARADOSSA

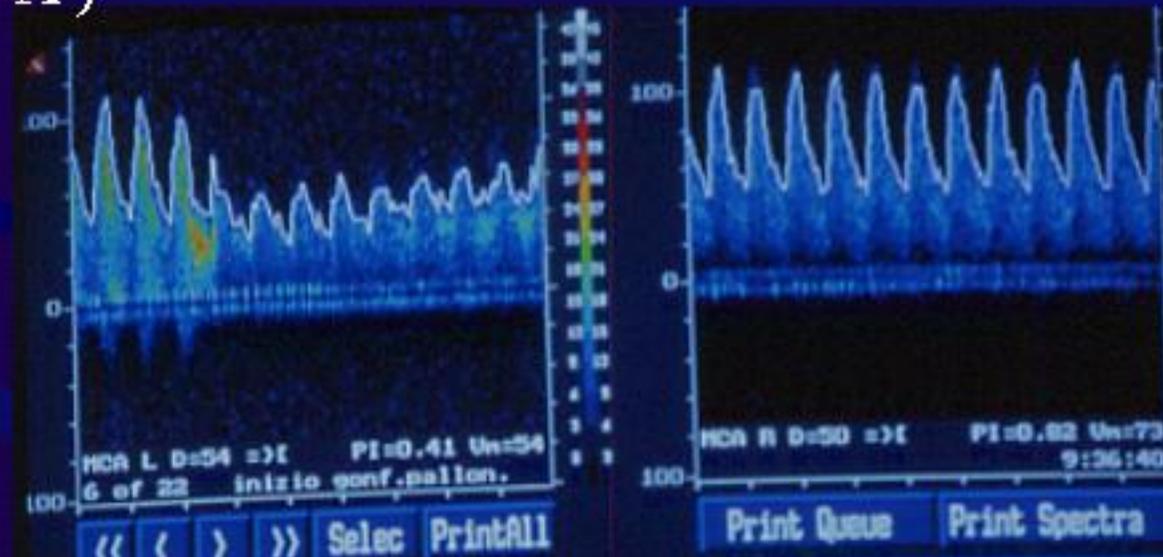


Registrazione multicanale

Manovra di Valsalva

ANGIOPLASTICA E STENTING CAROTIDEA

A)



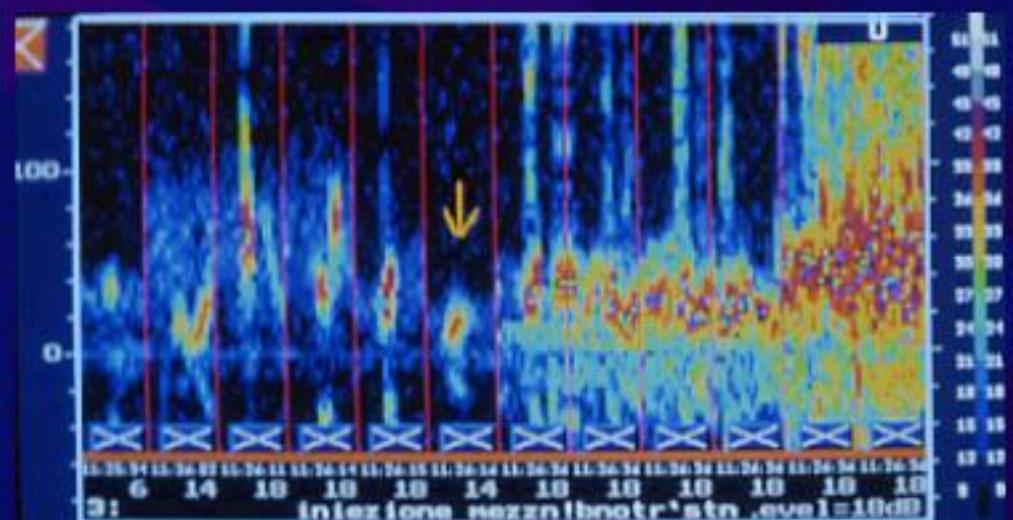
A-B) DILATAZIONE

C) PASSAGGIO
CATETERE E MDC

B)

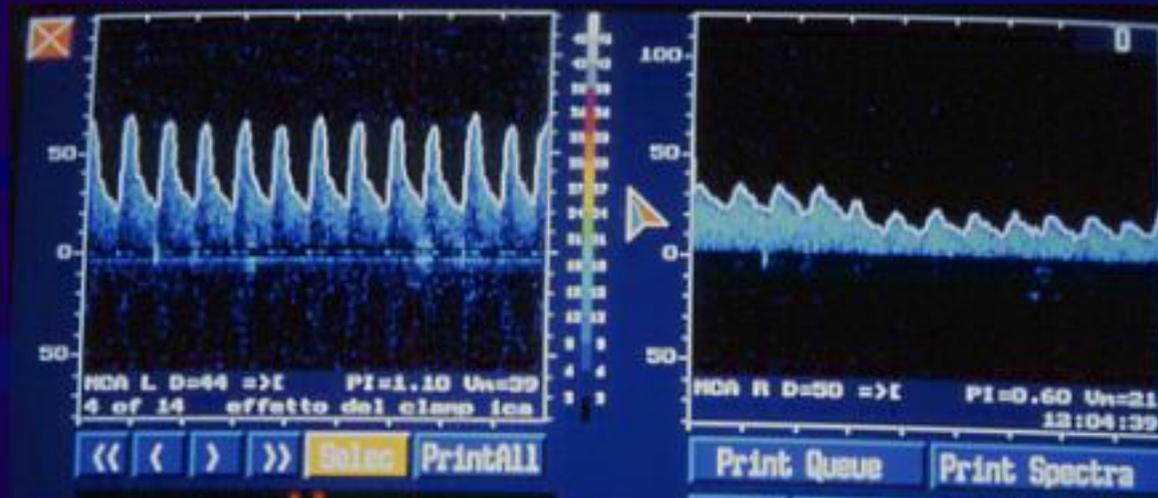


C)



ENDOARTERECTOMIA CAROTIDEA

A)

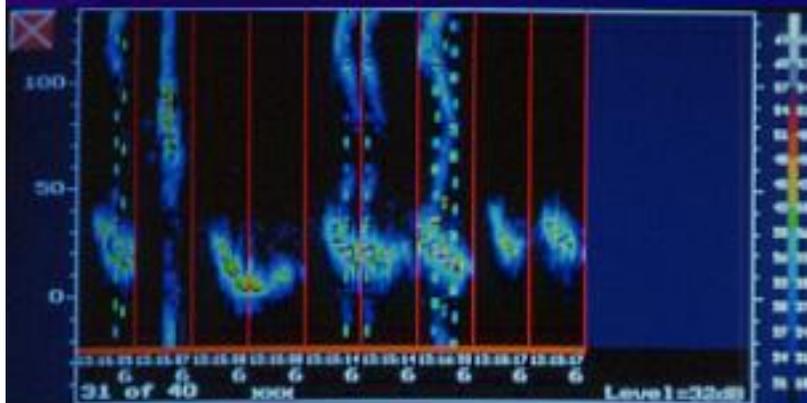


A) CLAMPAGGIO

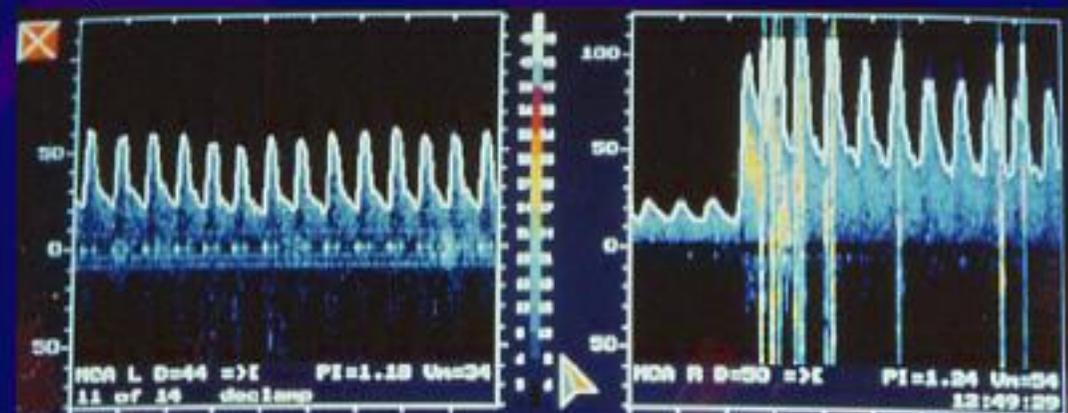
B) SHUNT

C) DECLAMPAGGIO

B)



C)



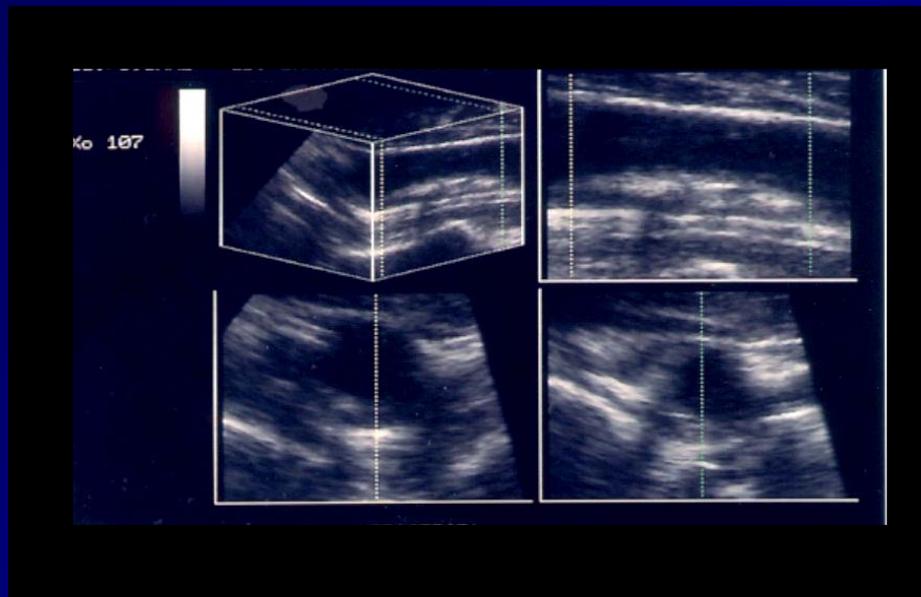
Effetto champagne

ECOGRAFIA BIDIMENSIONALE



❖ grado di stenosi del lume vasale

ECOGRAFIA TRIDIMENSIONALE



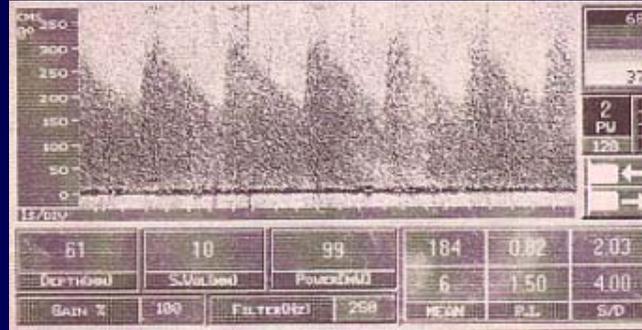
❖ caratteristiche della superficie della lesione

ECOGRAFIA TRIDIMENSIONALE: VANTAGGI

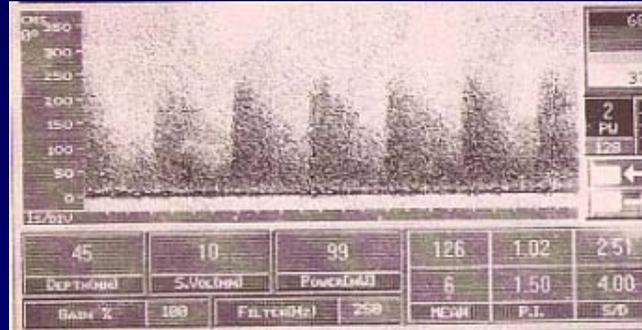


Geometria della placca → *determinazione di volume e area*

**A. CEREBRALE
MEDIA**

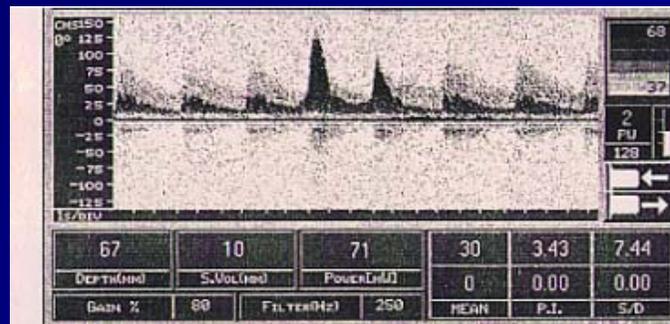


**FASE DI INIZIALE
RICANALIZZAZIONE**

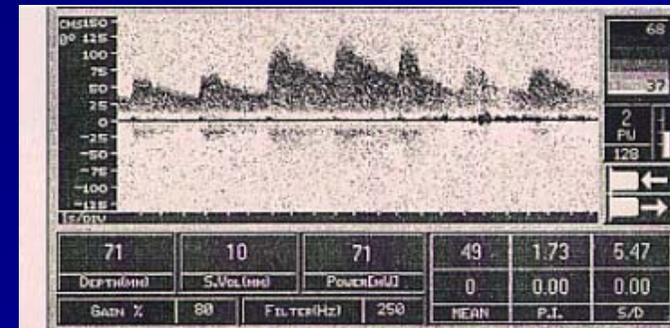


**FASE DI PROGRESSIVA
RICANALIZZAZIONE**

**A. CEREBRALE
POSTERIORE**

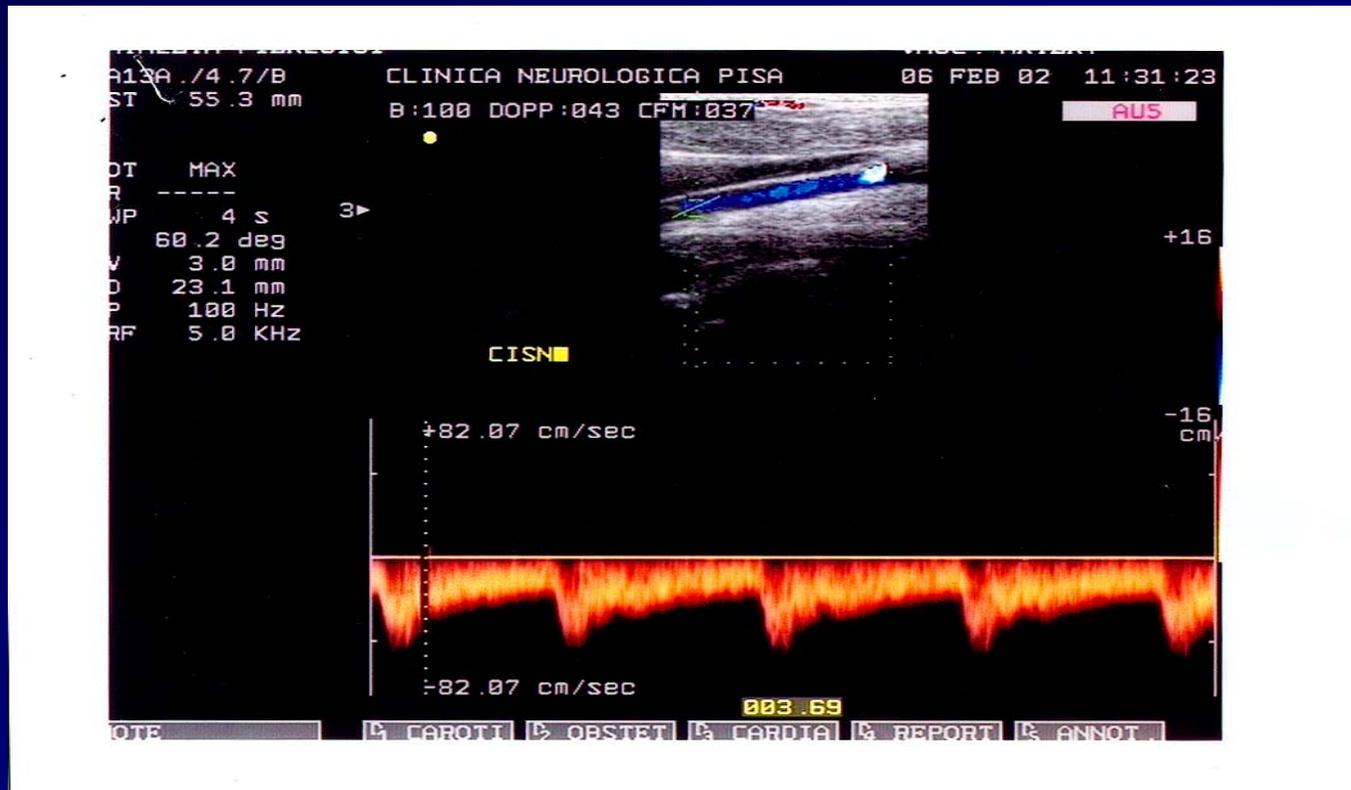


OCCLUSIONE



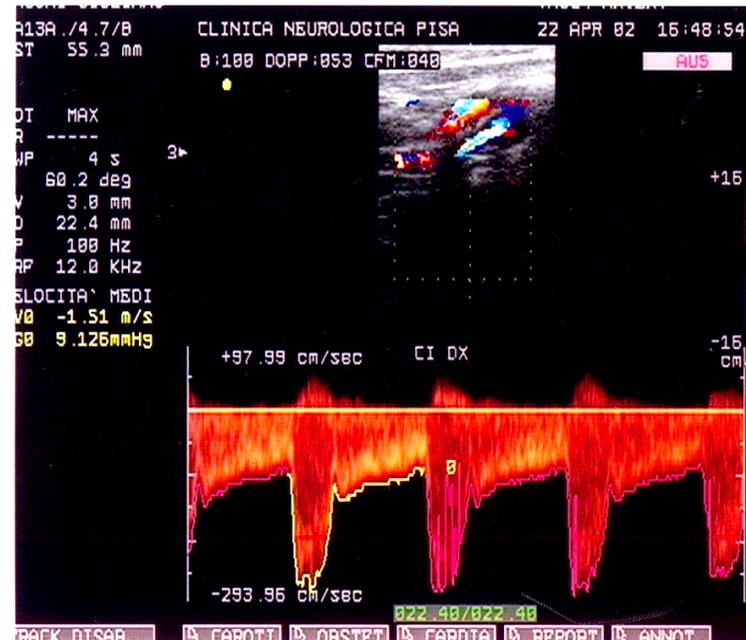
RICANALIZZAZIONE

REPERTI ULTRASONOGRAFICI



Valutazione velocimetrica di “stent”, indicativa di risoluzione della stenosi nella carotide interna.

REPERTI ULTRASONOGRAFICI



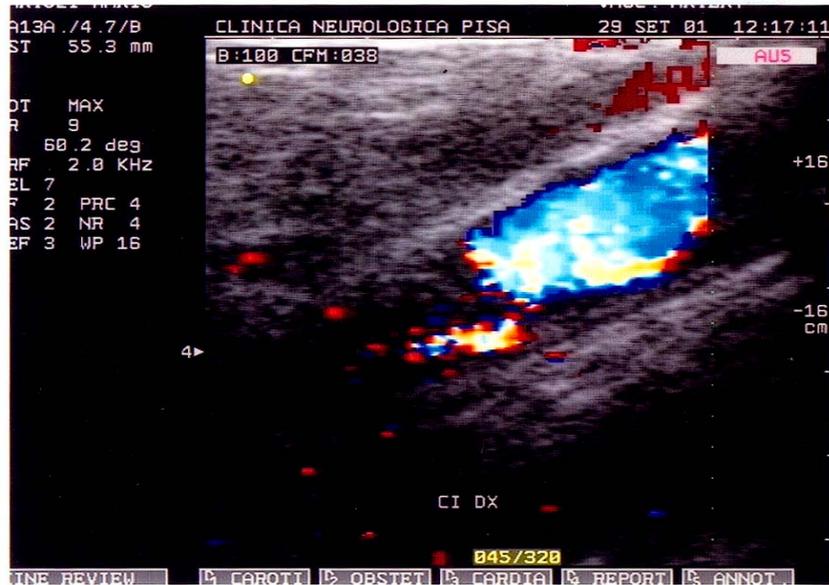
Valutazione velocimetrica di restenosi del 70% all'origine della carotide interna dopo angioplastica.



Valutazione velocimetrica di restenosi occlusiva della carotide interna successiva ad angioplastica.



REPERTI ULTRASONOGRAFICI



Valutazione ecografica di stenosi del 90% all'origine della carotide interna successiva ad angioplastica.



Immagine di stent posizionato nella carotide interna in presenza di flusso in assenza di restenosi (flusso laminare) documentato dall'uniforme colorazione in blu del vaso.

