CÂNCER DO PULMÃO

FISIOTERAPIA - FMRPUSP

Paulo Evora

Incidência

- Brasil -20.000 casos novos/ano
- USA – 164.000 casos novos/ano
- Mundo – 1.030.000 casos novos/ano

INC- 1999

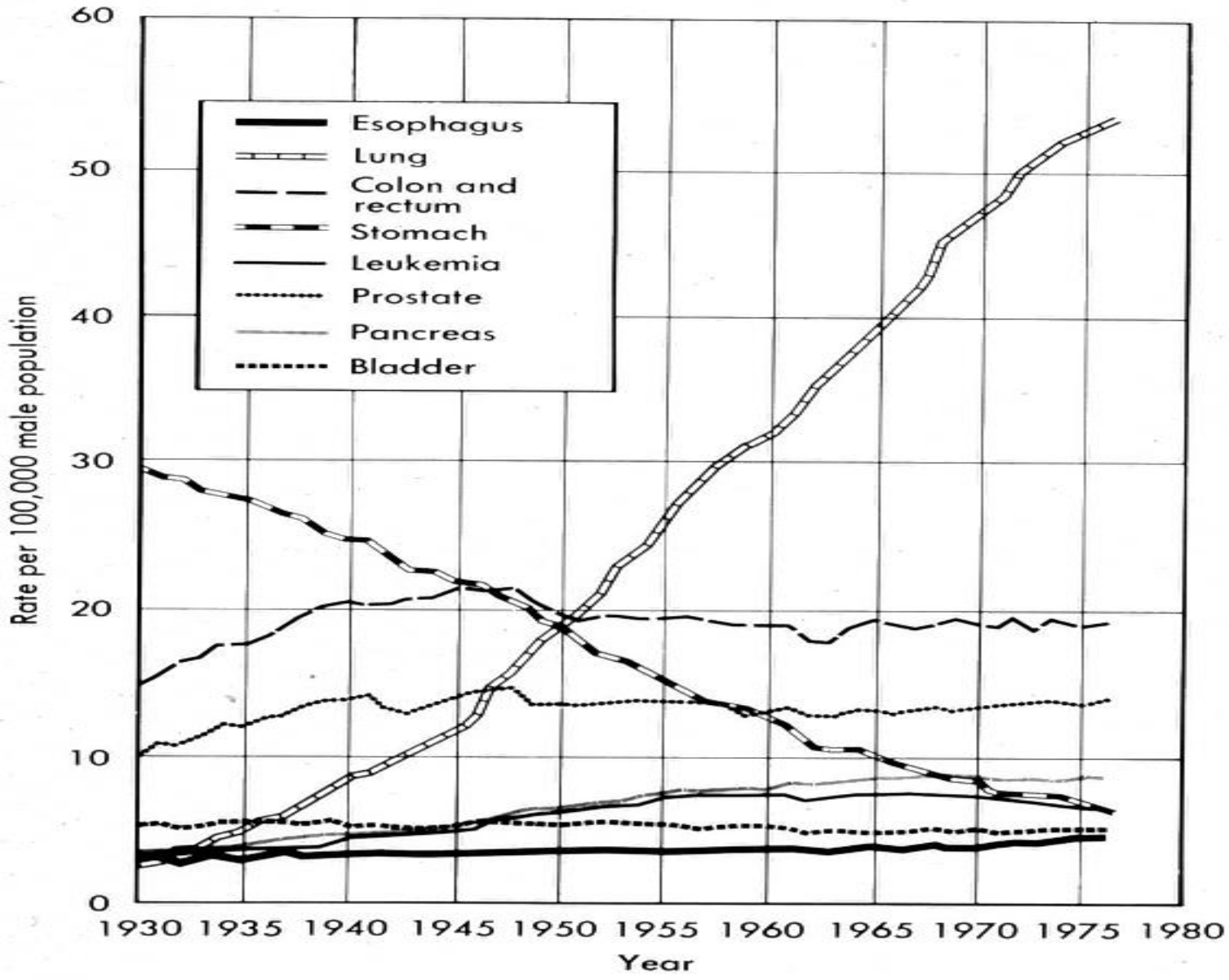
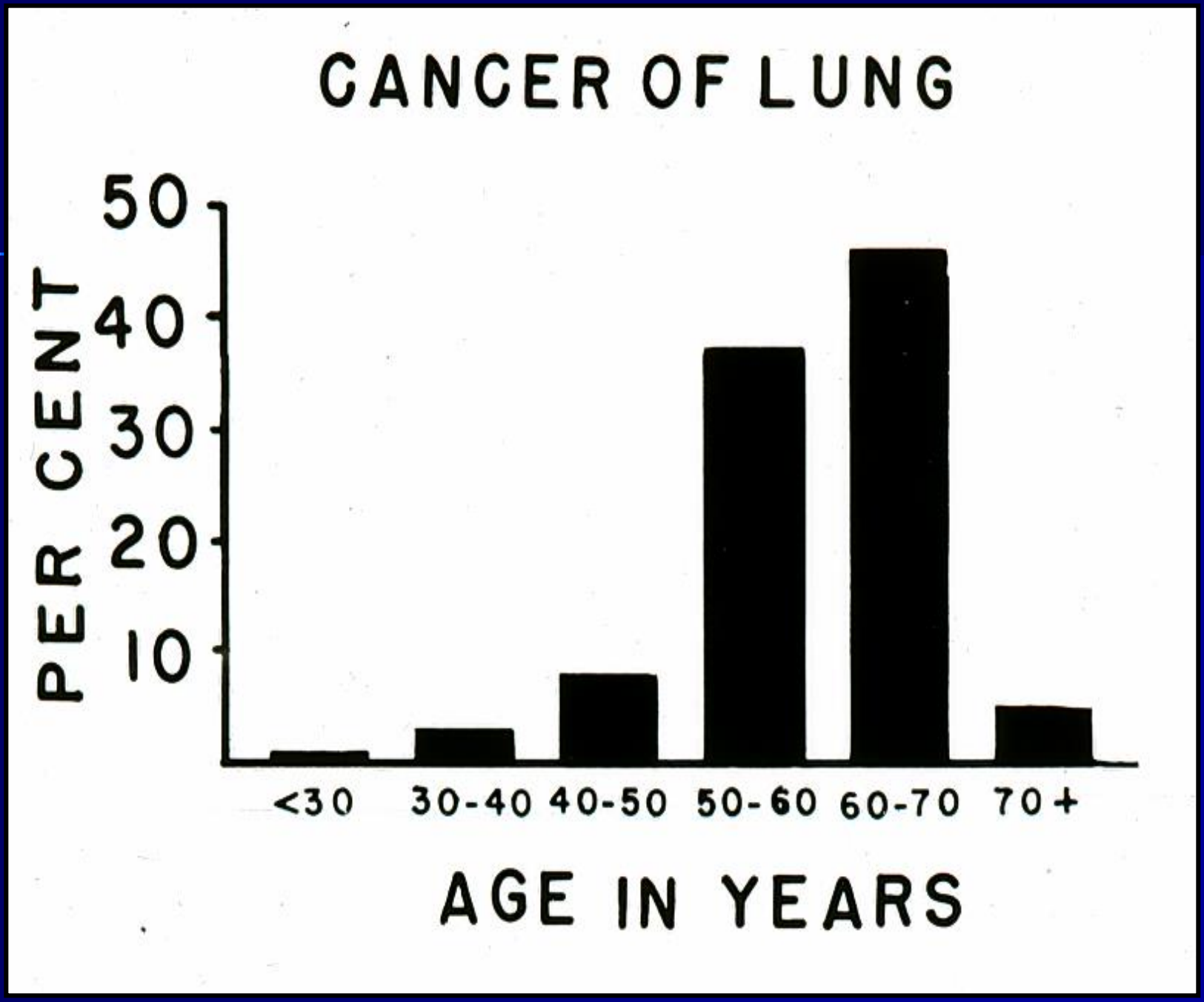


Fig. 11-3, cont'd. For legend see opposite page.

Câncer do pulmão

Classificação

- Ca epidermóide – 30%
- Adenoca – 30%
- Tu. misto – 20%
- Ca pequenas células (oat cell) – 14%
- Ca grandes células – 4%
- Carcinóides – 1%
- Outros (sarcomas, mesoteliomas) – 1%


CANCER OF LUNG
PER CENT
50
40
30
20
10
<30
30-40
40-50
50-60
60-70
70+
AGE IN YEARS

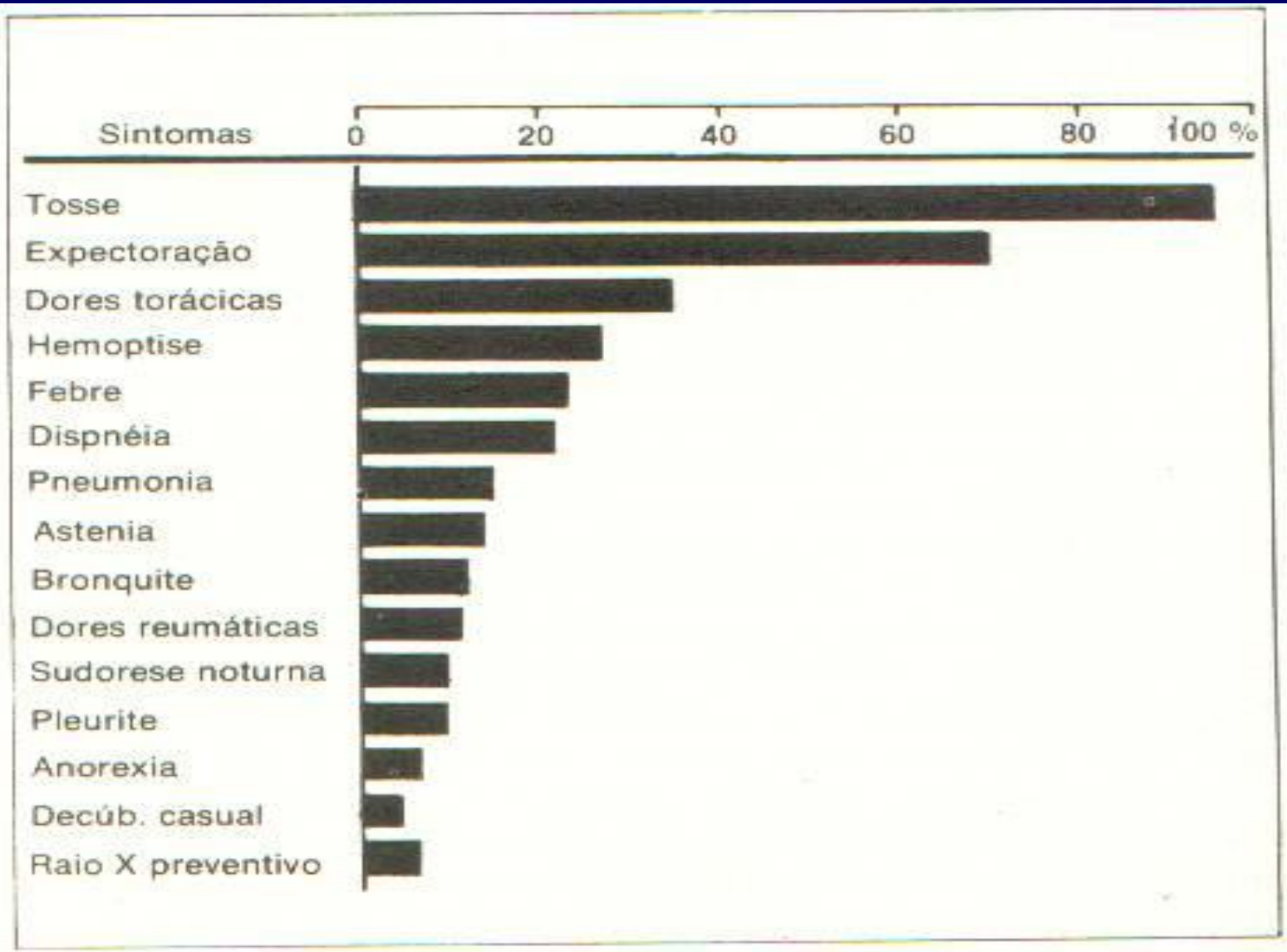


Fig. 3.72 Freqüência dos sintomas precoces do câncer brônquico. baseada em 292 casos de Hang.

Fatores de risco

- **Susceptibilidade a produtos carcinogênicos**

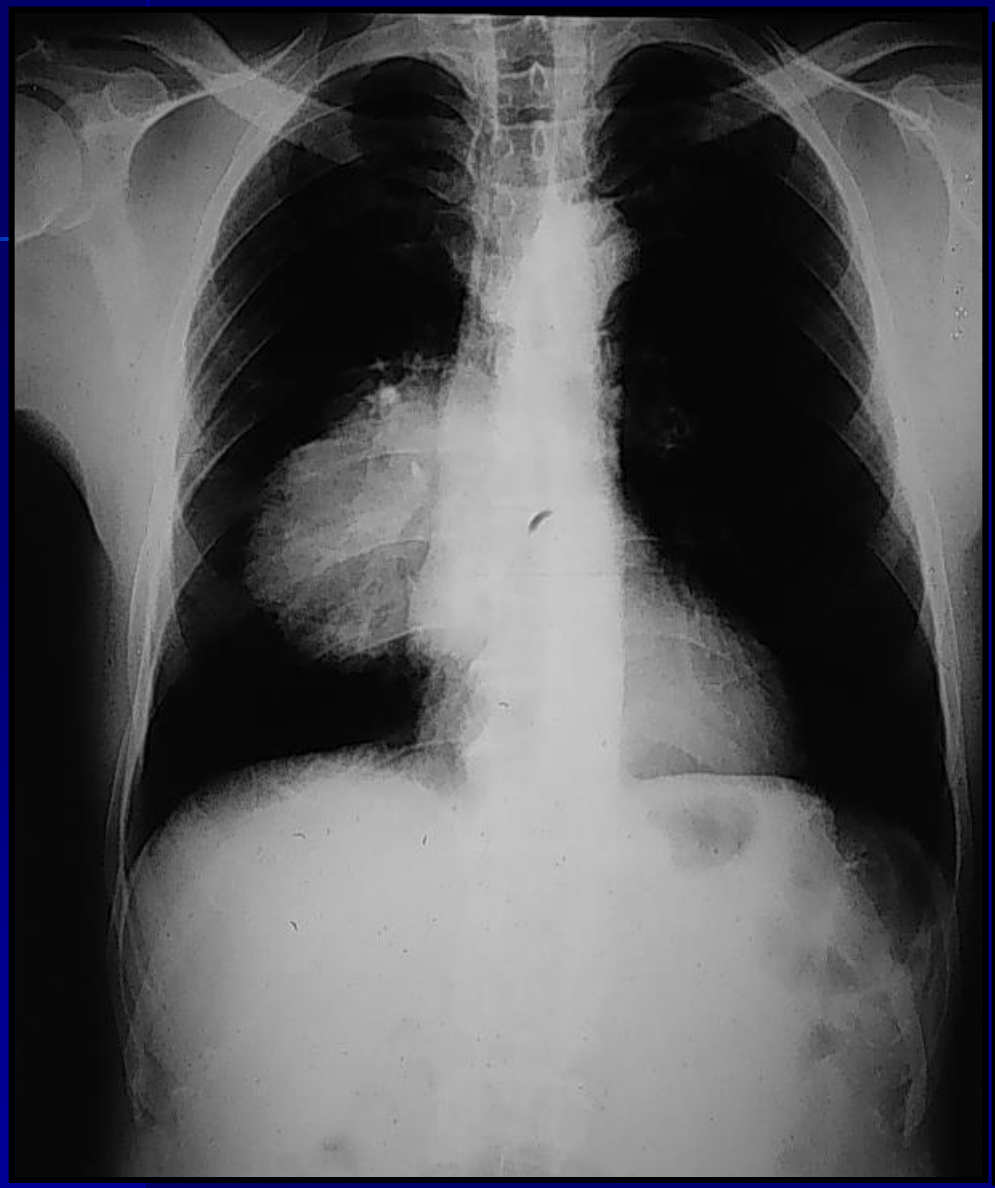
- Tabagismo direto e indireto
- Agentes ocupacionais – asbestos, sílica, etc.
- Hereditários

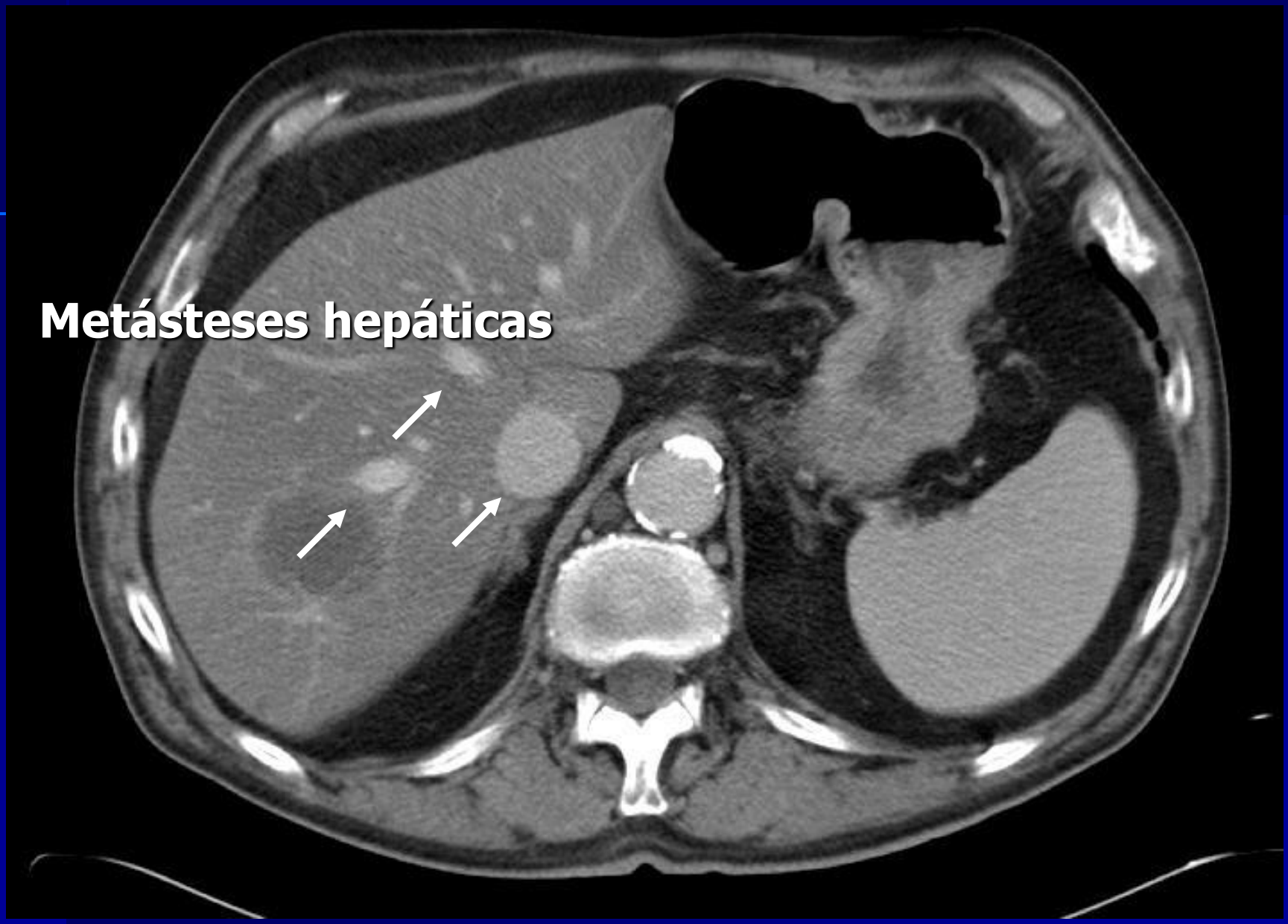
Apresentação Clínica

95% Sintomáticos

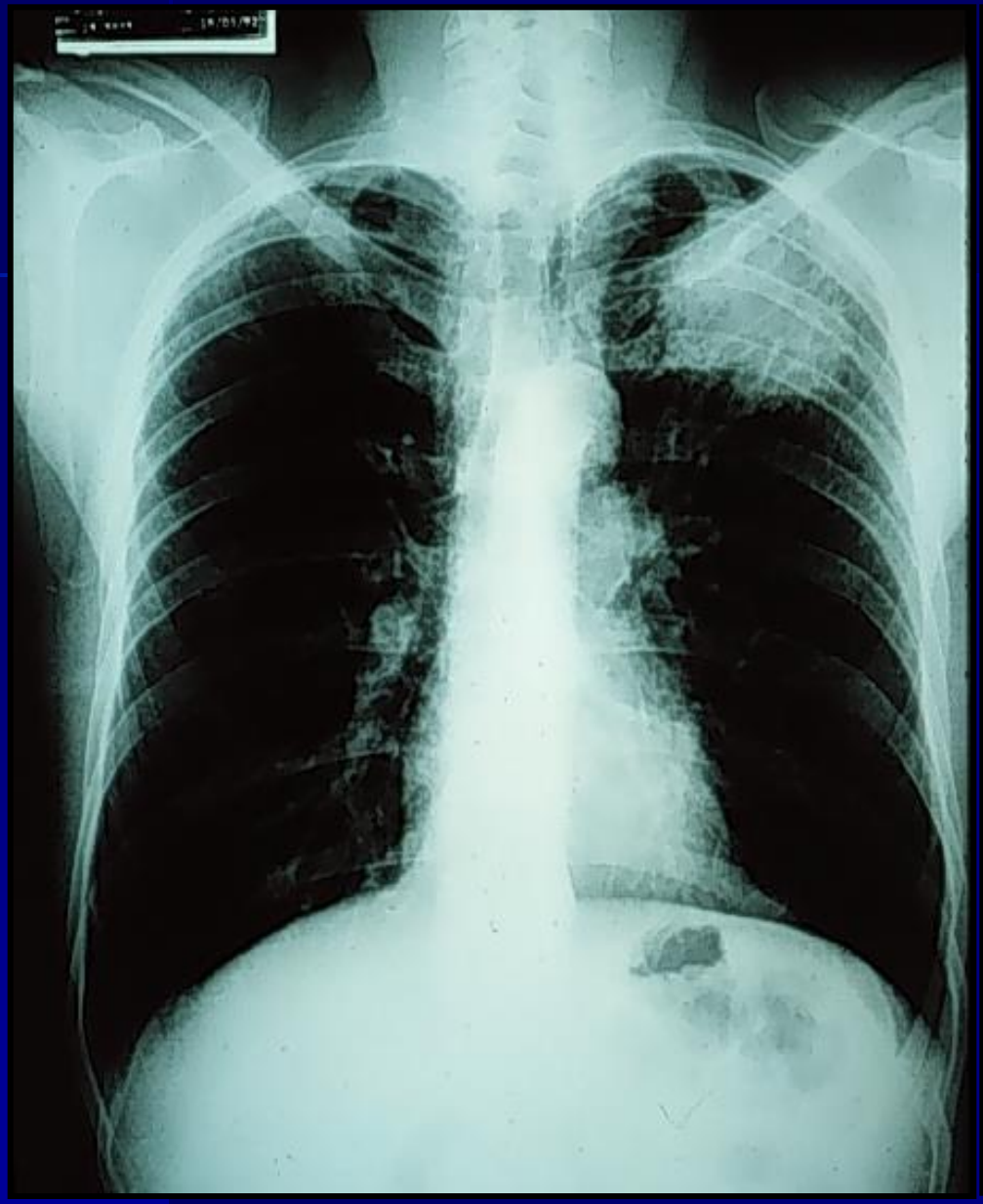
- Devido ao Tu. primário 27%
- Devido a metástases 32%
- Síndromes paraneoplásicas 34%

Carbone et al., 1970




Metásteses hepáticas


000397522-25 26/08/43 M
JOSE C. ALVES BESSA
S 10 1.9S
P -24.0
A 0.0
B 350
F 3
HF/S
120KV
175MA
C
L
24/07/96
18:11:41
LX/C
W351
+72
512*512
TC TORAX




000299889-07 11/01/42 M
POBERTO DA SILVA RAMOS
S 3 1.95
P -50.0
A 0.0
B 219
F 3
HF/S
120KV
175MA
C
L
20/05/92
18:17:20
LX/C
W325
+78
512*512
MAG*1.6
TC TORAX
HC.FMRP.USP

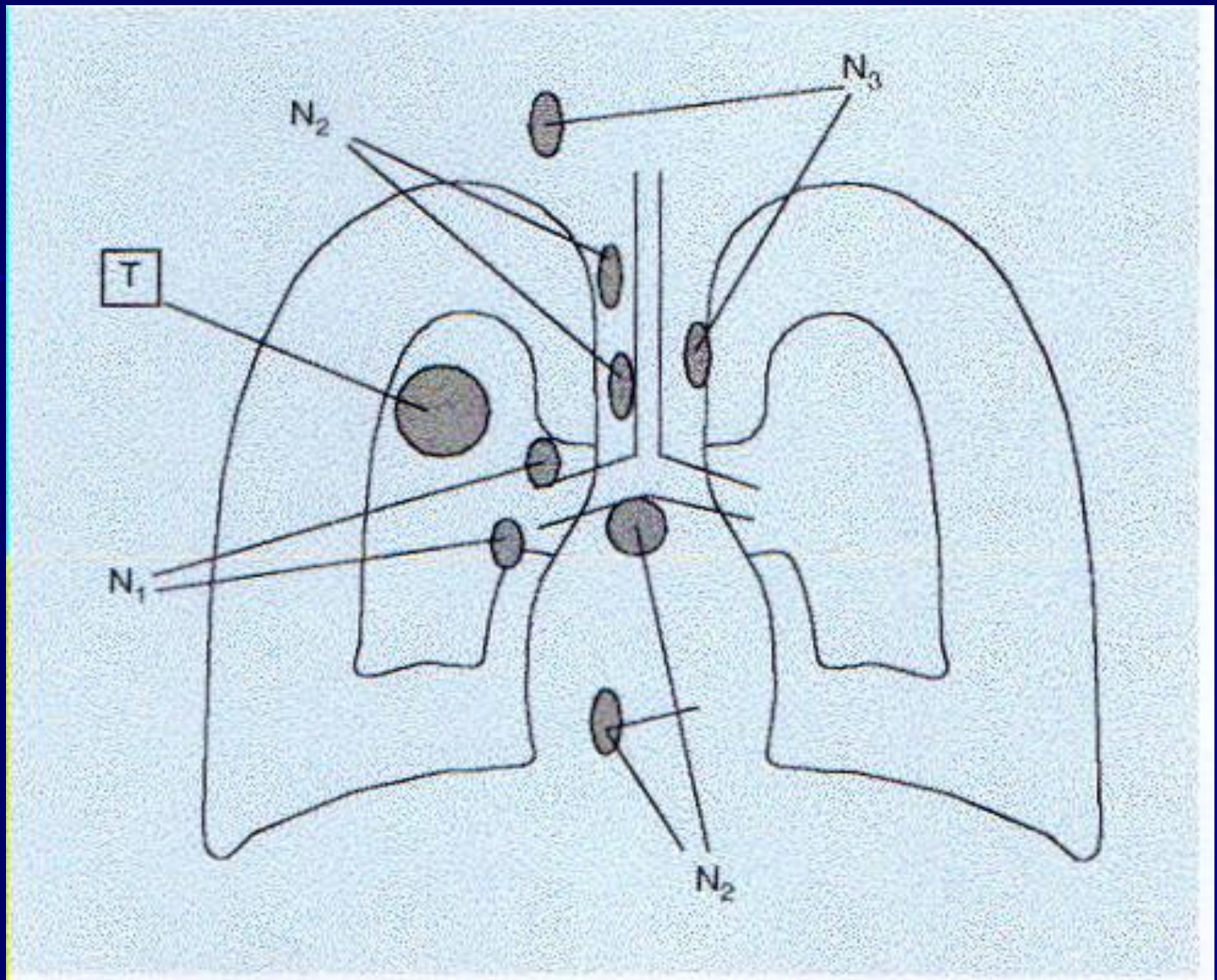


Fig. 5.47. *Esquema de la estadificación ganglionar en el carcinoma broncógeno.*

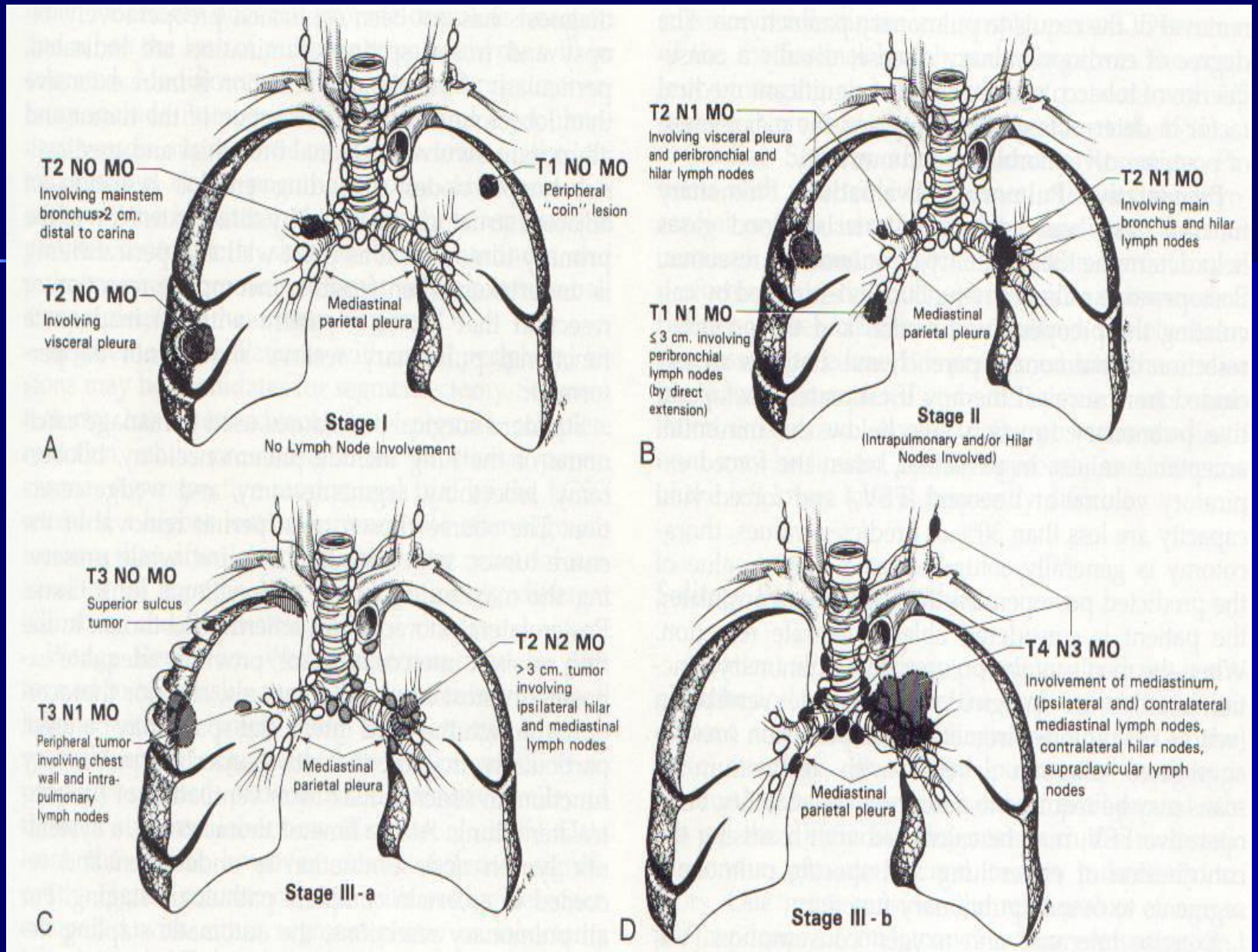


FIGURE 19–2. Lung cancer staging. *A*, Stage I. *B*, Stage II. *C*, Stage III-a. *D*, Stage III-b. (*A–D*, From Mountain, C. F.: A new international staging system for lung cancer. Chest, *89*:225S, 1986.)

Table 19–3. STAGING GROUPS FOR LUNG CANCER

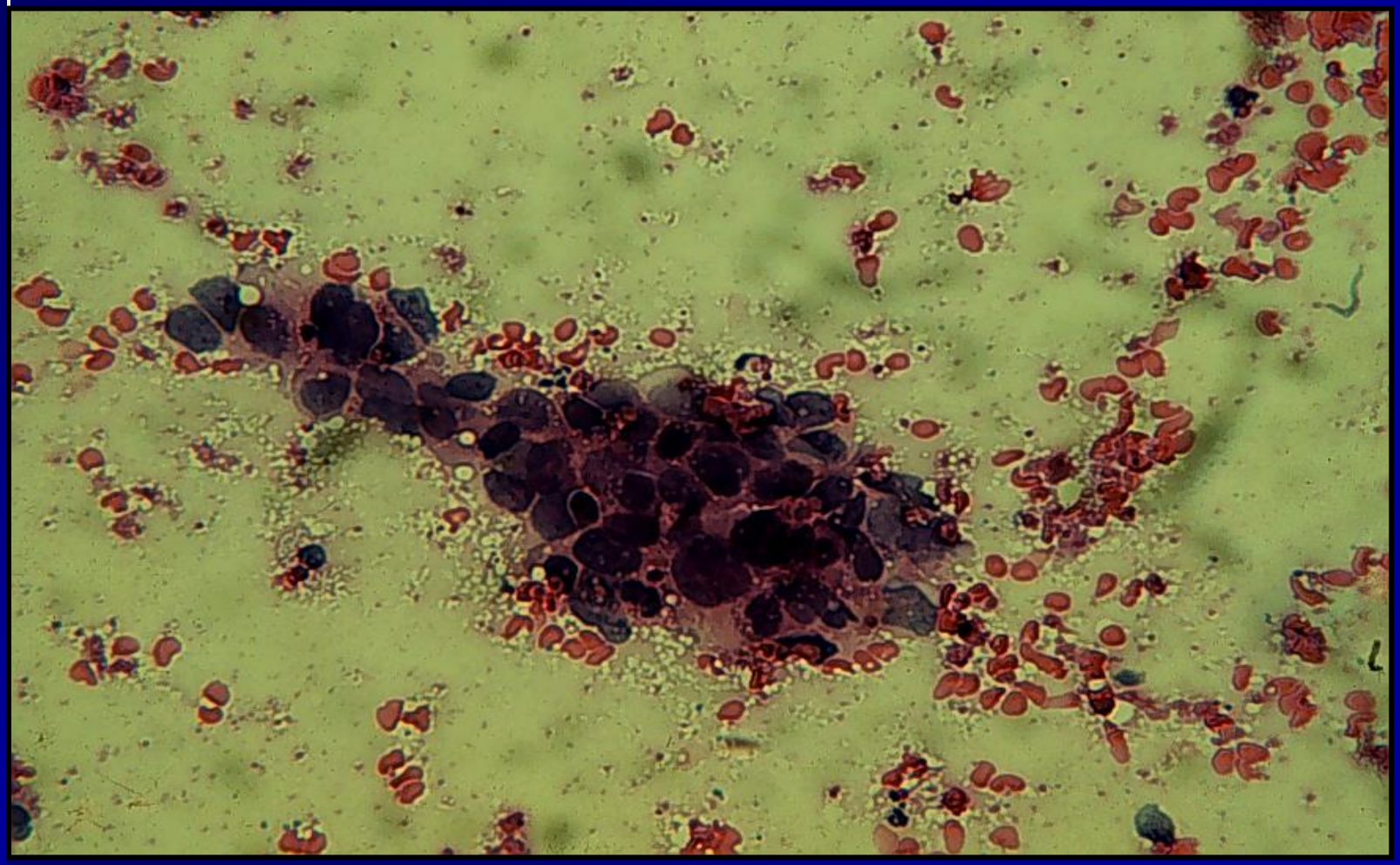
Stage	T	N	M
Occult	TX	N0	M0
Stage I	T1–2	N0	M0
Stage II	T1–2	N1	M0
Stage IIIA	T3	N0–1	M0
	T1–3	N2	M0
Stage IIIB	T4	N0–2	M0
	T1–4	N3	M0
Stage IV	Any T	Any N	M1

From Mountain, C. F.: A new international staging system for lung cancer. Chest, 89:225S, 1986.

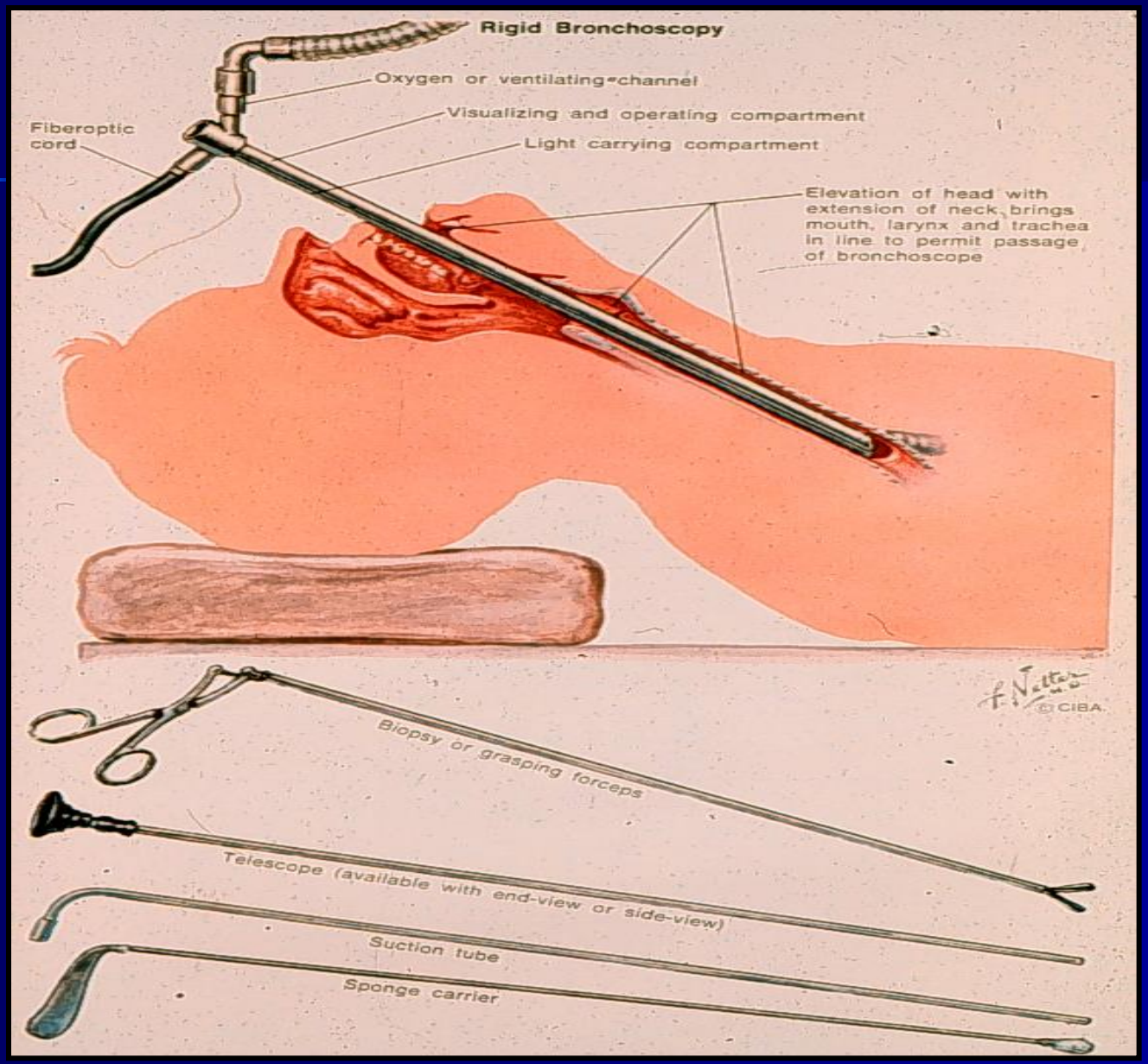
Diagnóstico

- Citologia do Escarro
- Broncoscopia ou Fibrobroncoscopia com Lavado brônquico, e ou biópsia trans-brônquica
- Punção por Agulha para Biópsia
- Toracocentese ou Biópsia Pleural por Agulha
- Biópsia de Daniels (gânglios supraclaviculares)
- Mediastinoscopia

Citologia do escarro



BRONCOSCOPIA RÍGIDA



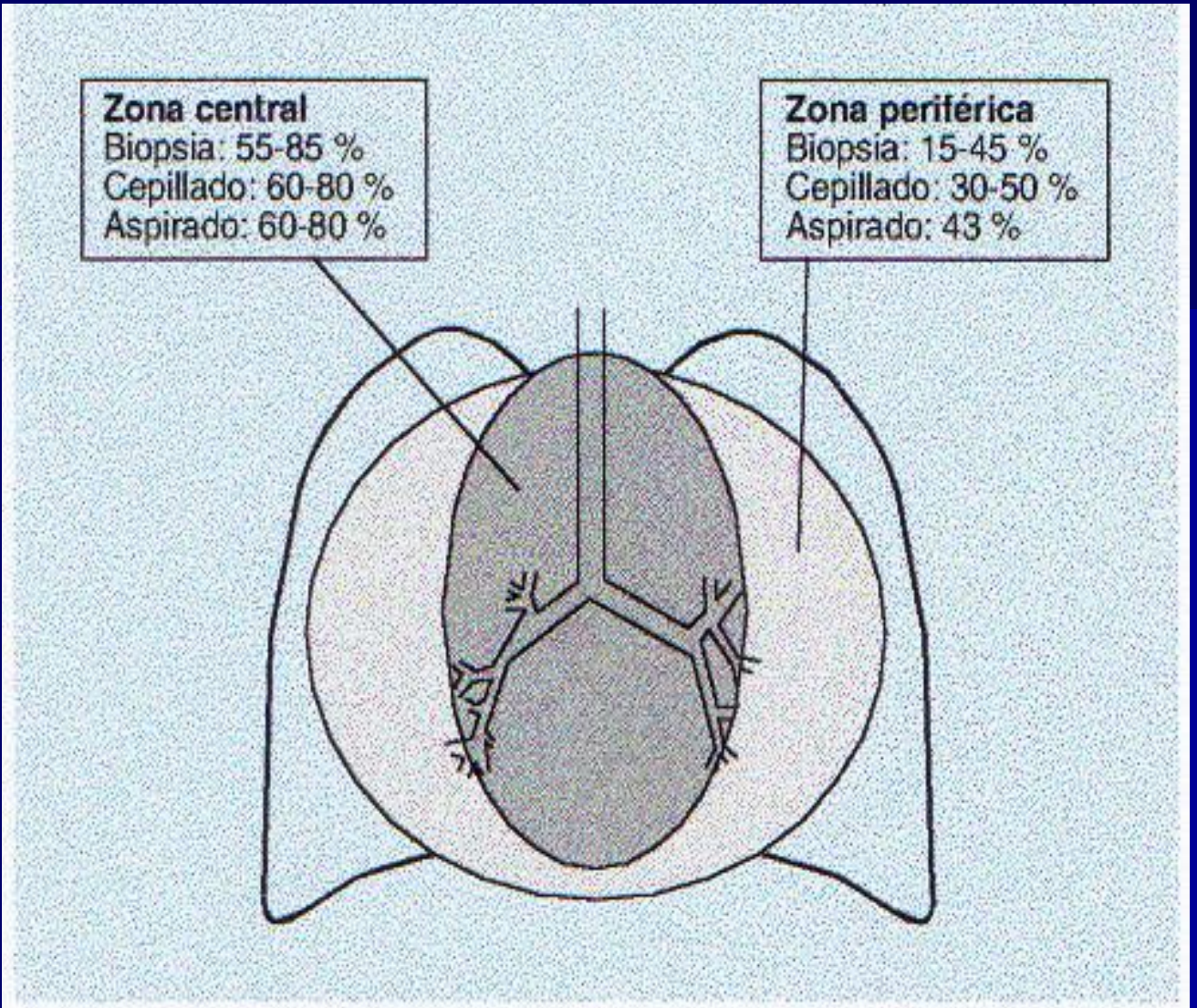


Fig. 5.46. *Rendimiento de las técnicas broncoscópicas en el cáncer broncopulmonar según su localización.*

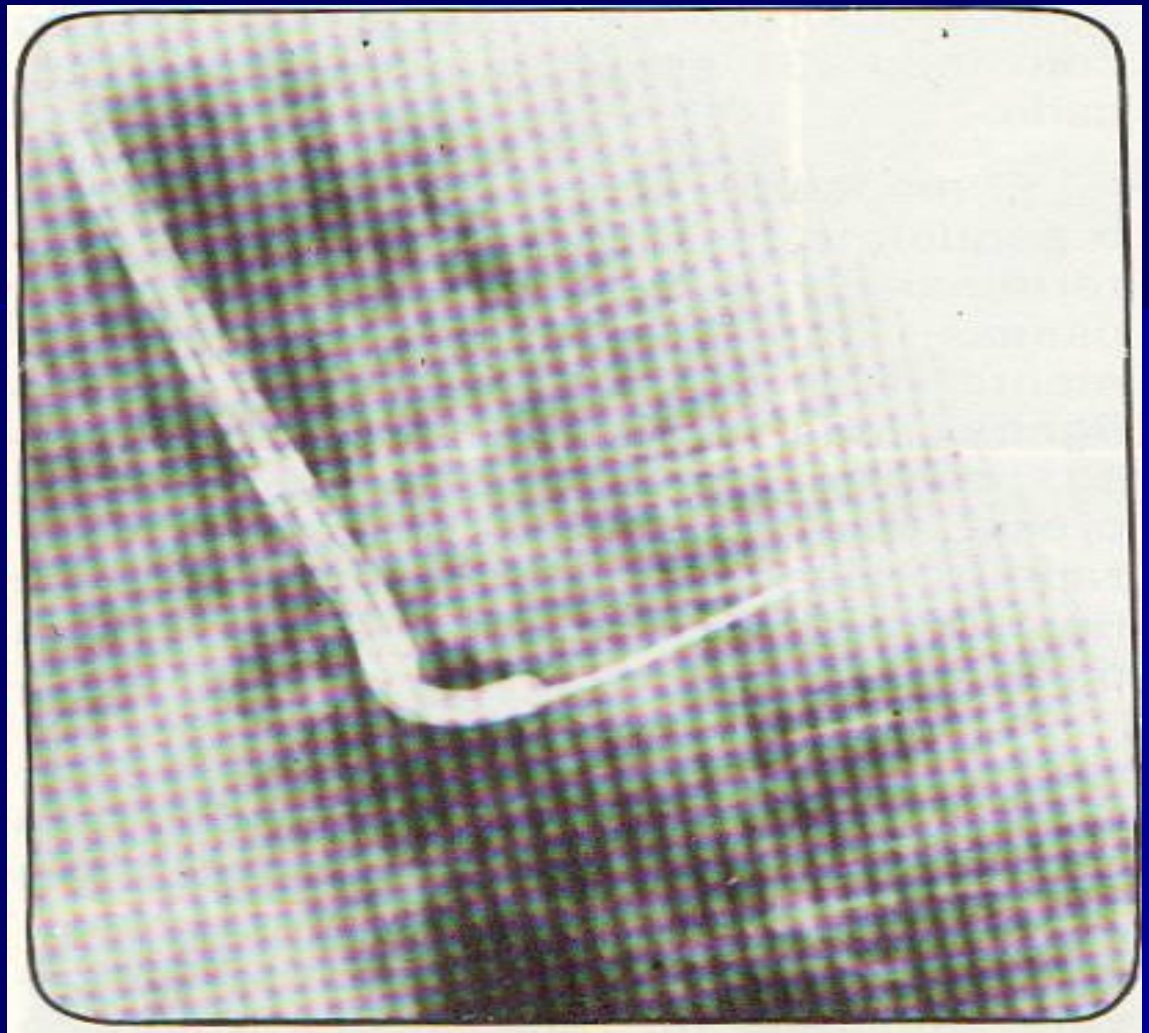
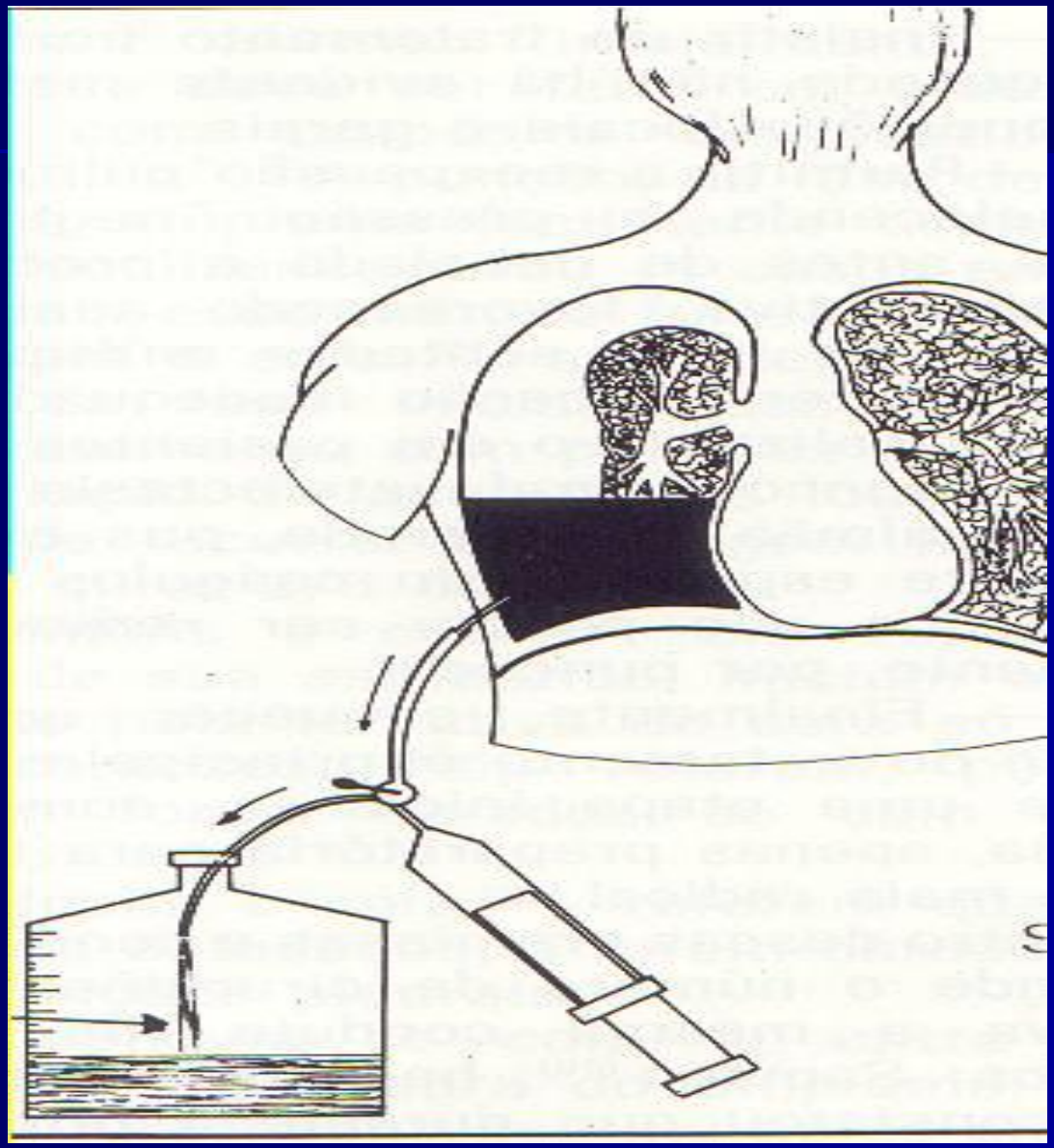


Figura 7-20
Biópsia de nódulo periférico através de broncoscopia.

CITOLOGIA DE LÍQUIDO PLEURAL

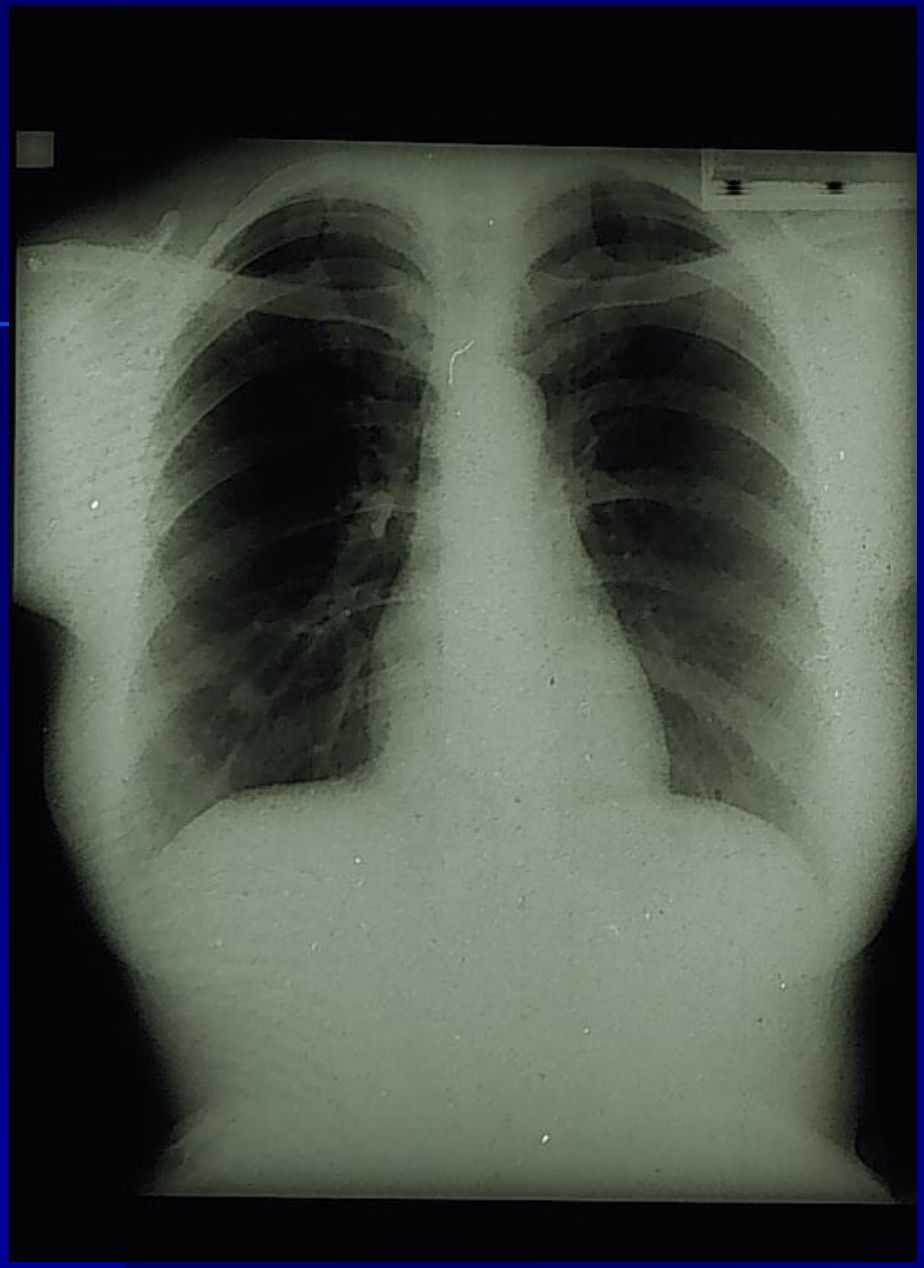


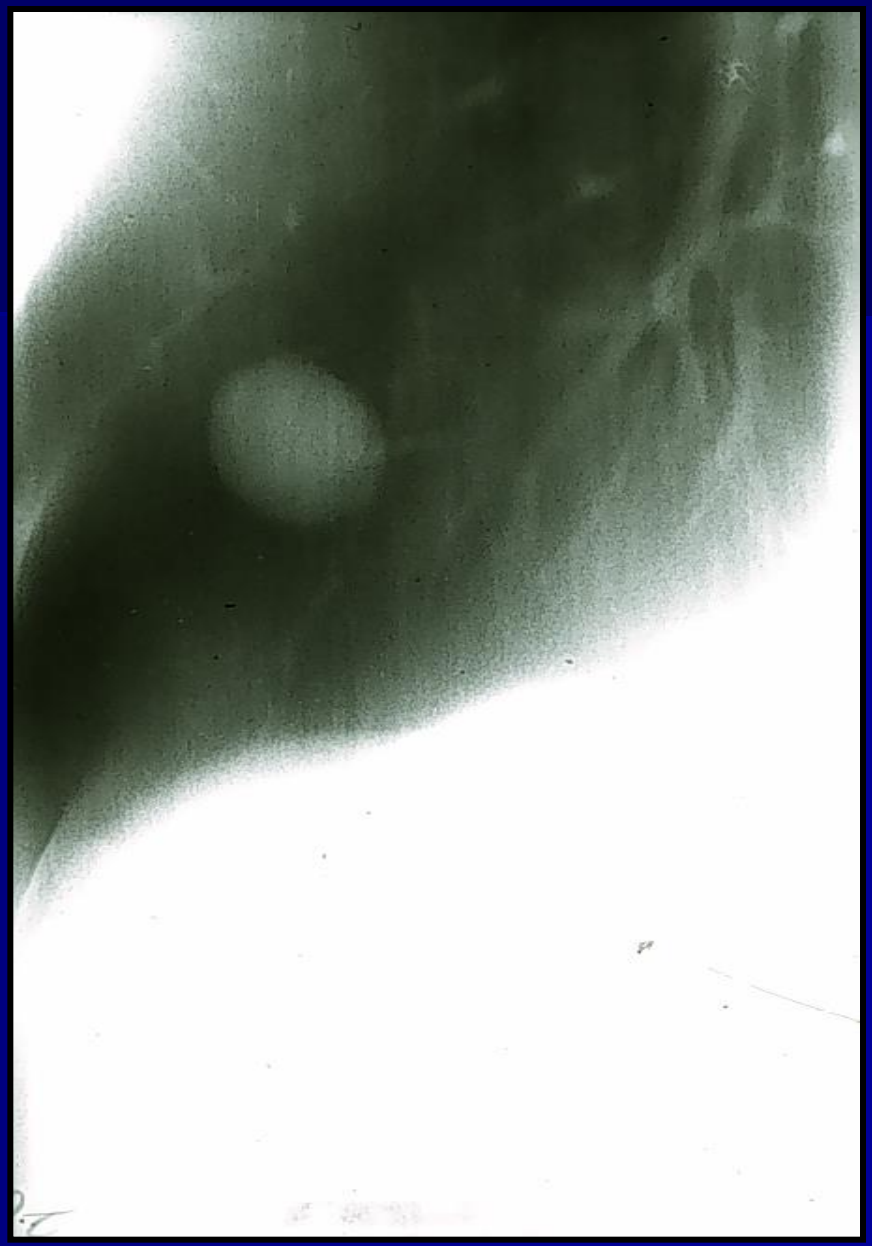
Nódulos Pulmonares

Diagnósticos diferenciais

Nódulo solitário: classificação etiológica

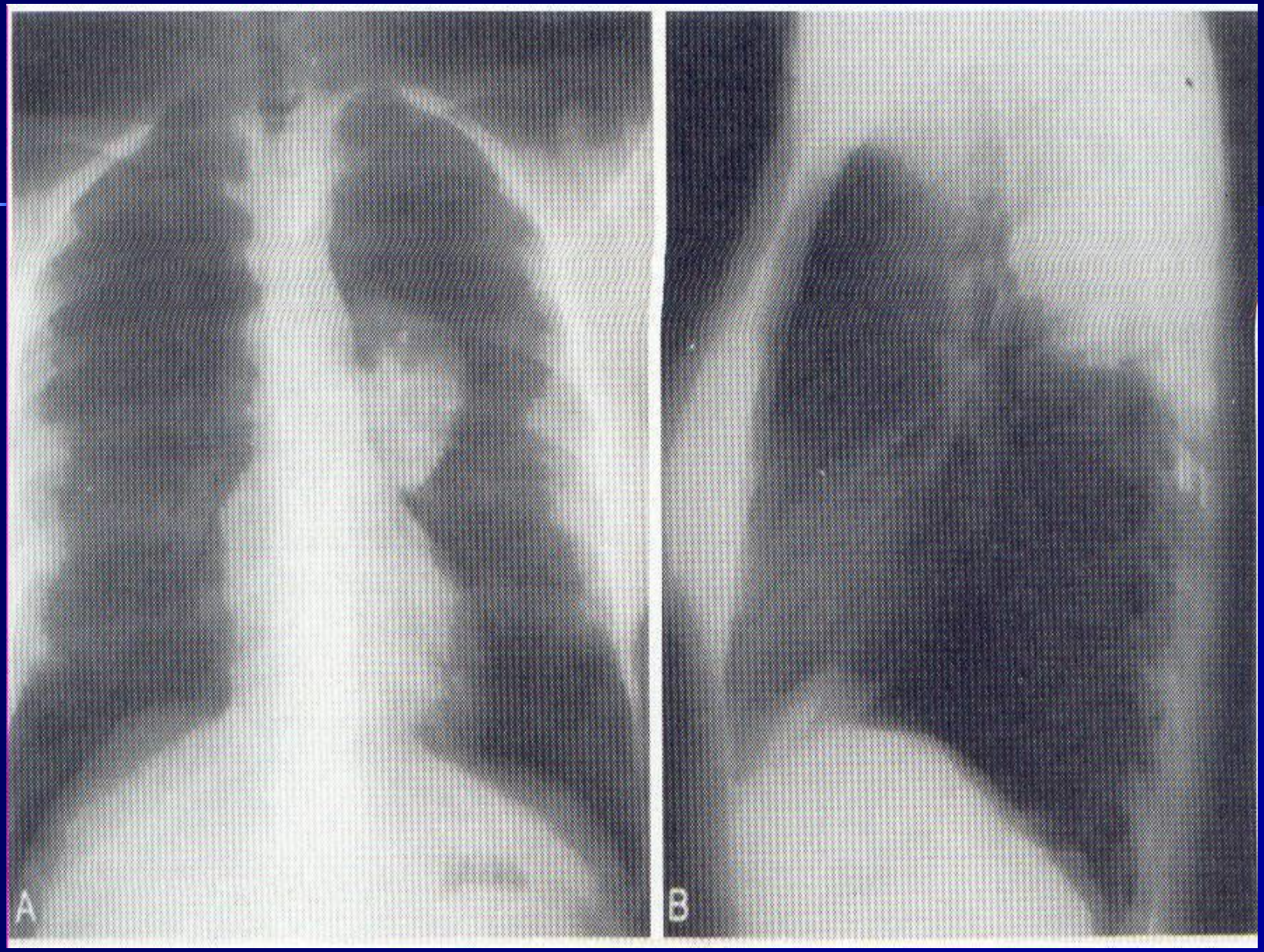
Congênitos:	Cisto broncogênico "repleto" Seqüestro broncopulmonar Anomalias vasculares
Infecciosos:	Tuberculoma e infiltrado tuberculoso Micetomas Cisto hidático Abscesso Pneumonia crônica
Neoplásicos:	Carcinoma broncogênico primitivo Carcinoma alveolar Hamartomas
Imunológicos:	Nódulo reumatóide Síndrome de Wegener Síndrome de Goodpasture
Vários:	Hematoma pulmonar pós-traumático Infarto pulmonar





Hamartoma

(benigno)


A
B

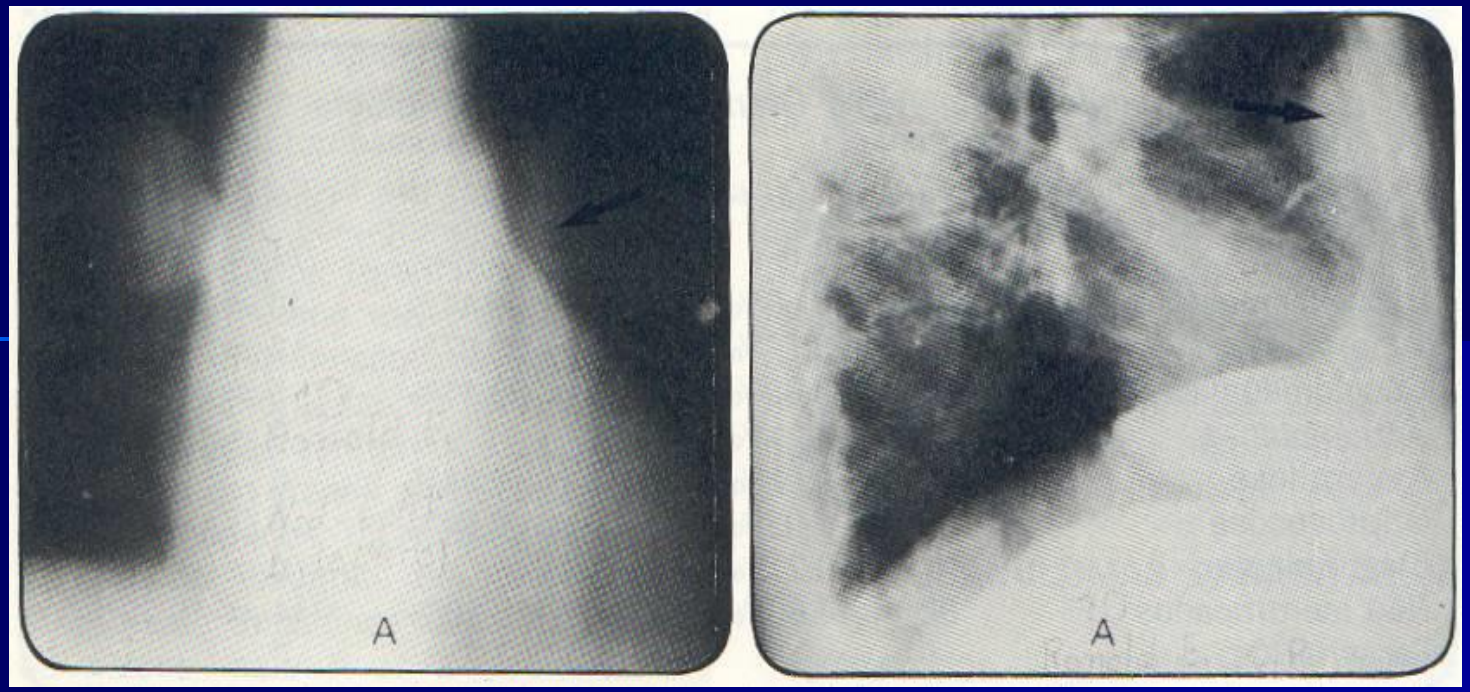


Figura 7-3
O hamartoma removido e a superfície de corte.

Câncer Pulmonar
Complicações

METÁSTASES

CINTILOGRAFIA ÓSSEA

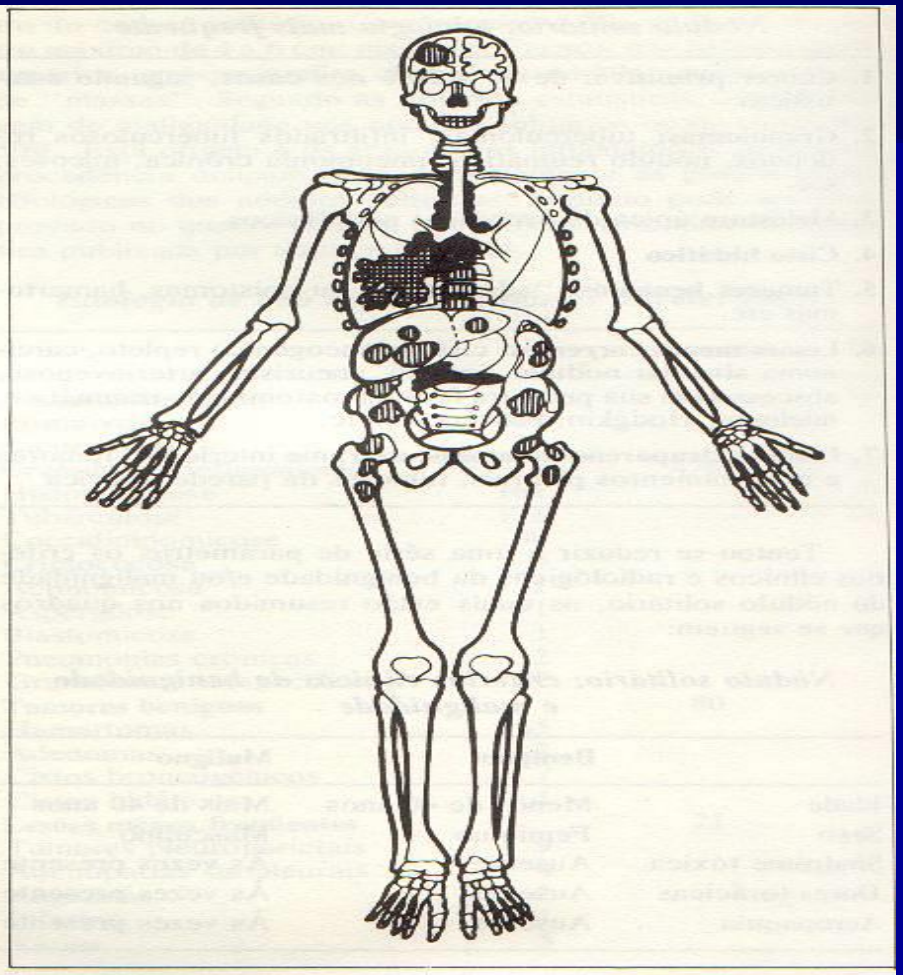
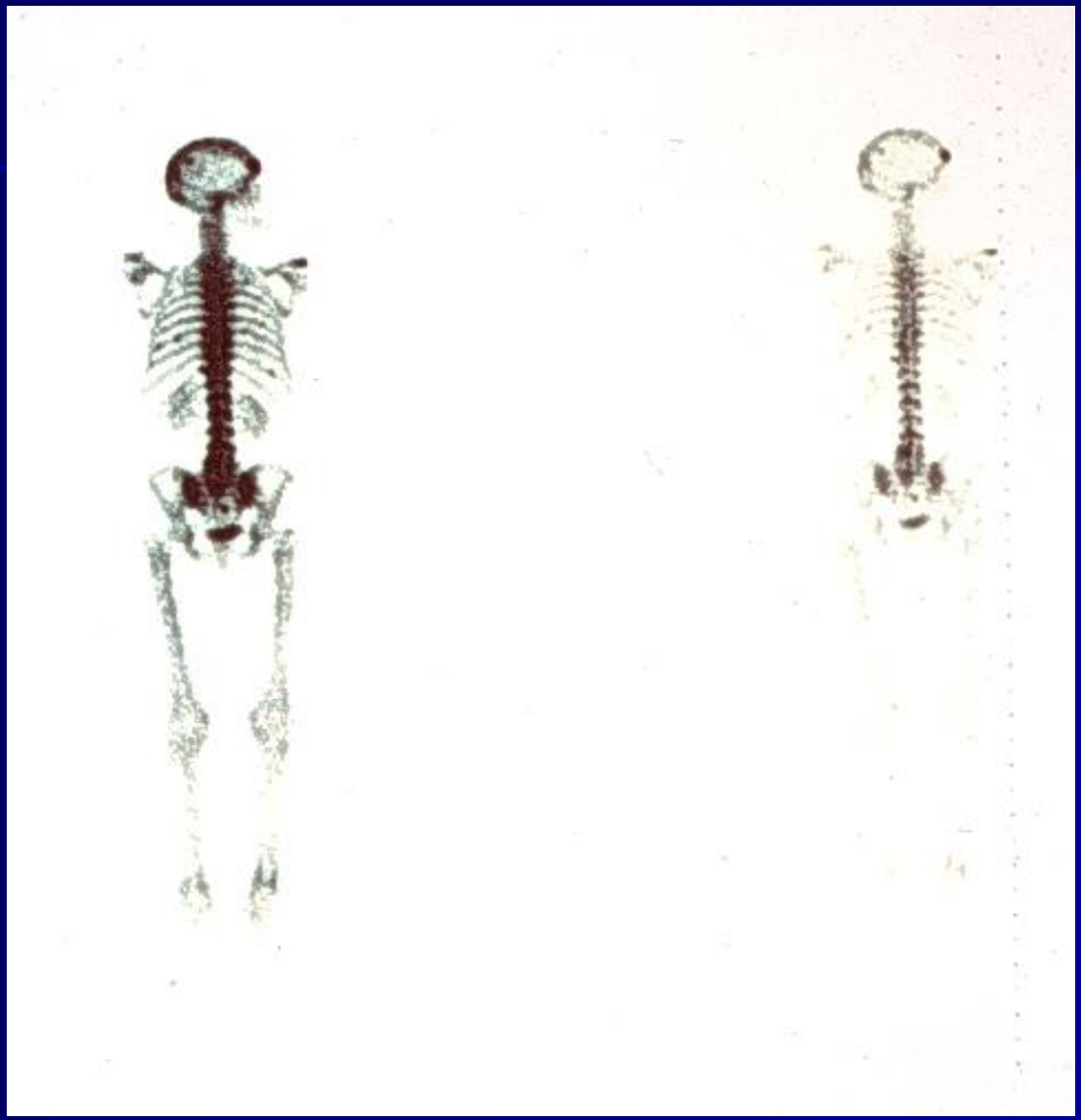
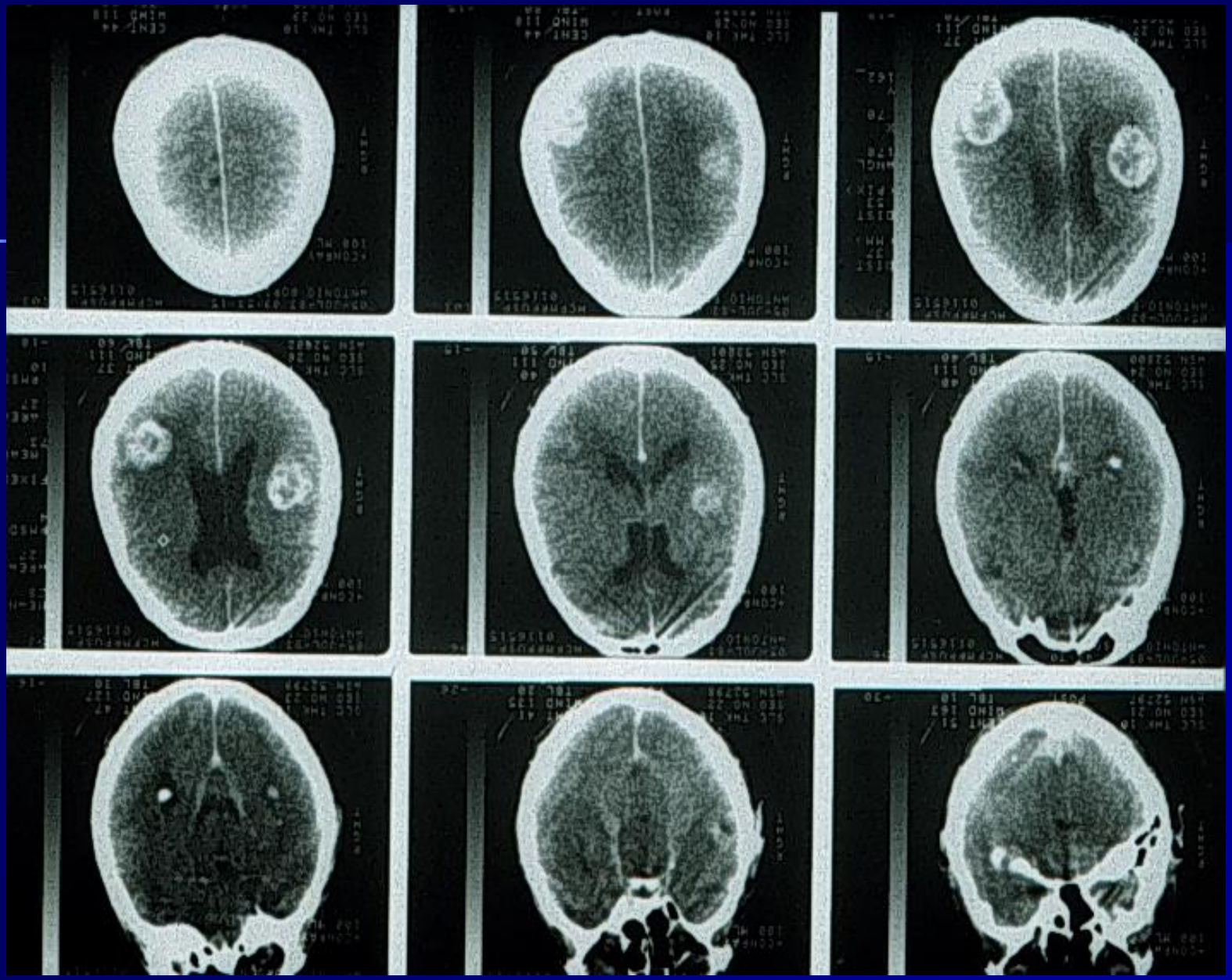


Fig. 3.76 Metastatização do ''tipo pulmonar''. Carcinoma de células pequenas do brônquio fonte e do brônquio do lobo inferior direito (quadriculado), com metástases nos linfonodos do abdome e do mediastino (em negro) e metástases à distância no esqueleto, fígado, rim, supra-renal e cérebro (hachuriado). Paciente de 50 anos de idade. (Schinz.)

Cintilografia óssea





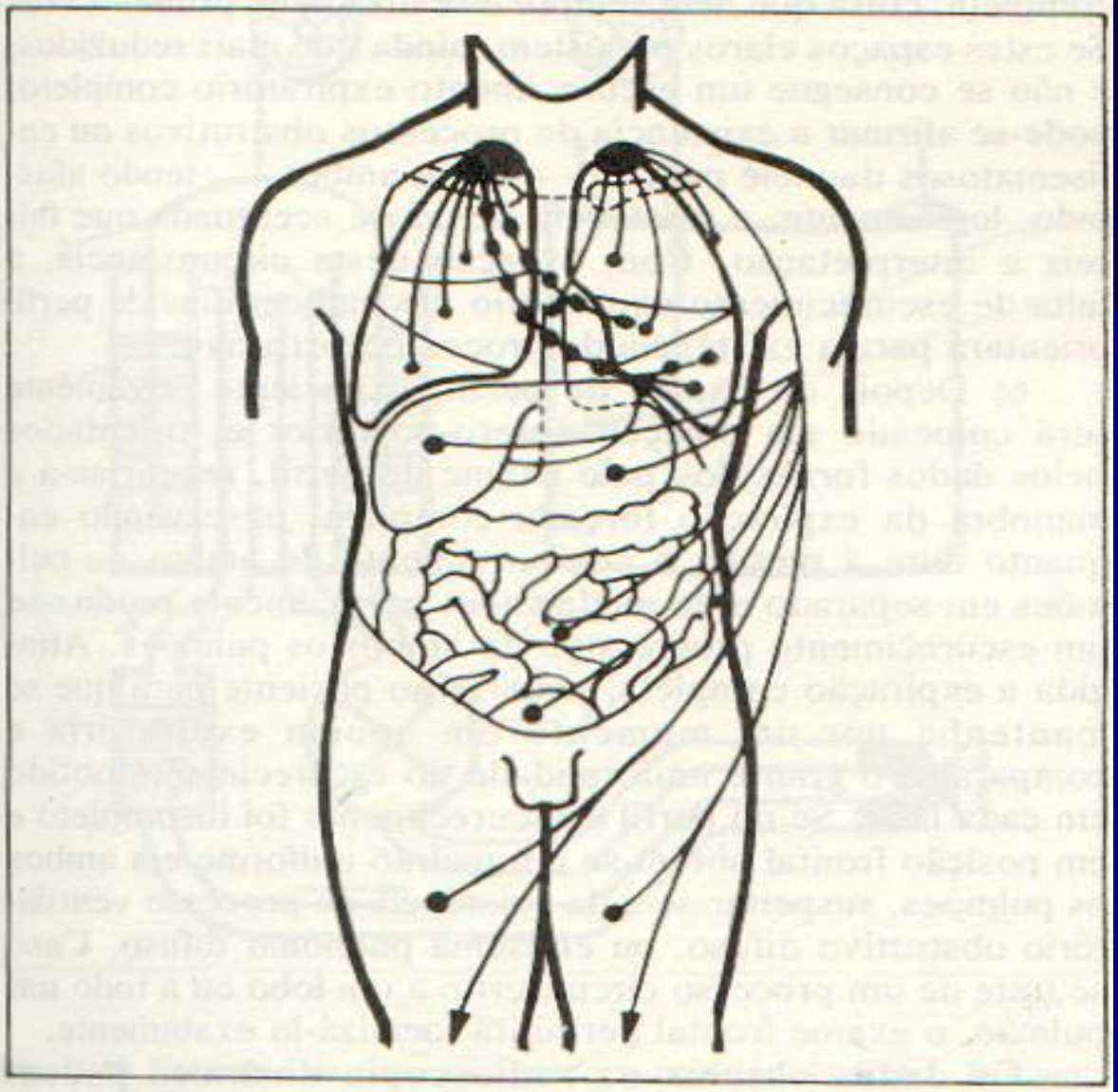


Fig. 3.39 Distribuição dos canais linfáticos do tórax, abdome e membros inferiores afluentes aos linfonodos supraclaviculares.

Tratamento

Protocolo

- Tipo Histológico
- Estadiamento

TABLA 5.43. Indicación de los procedimientos terapéuticos en el cáncer broncopulmonar según la estirpe histológica y el estadio*

Carcinoma	*Tratamiento*
Carcinoma distinto al de células pequeñas	
Estadio I	Cirugía
Estadio II	Cirugía
Estadio IIIa	
Tumor del surco superior	Radioterapia y cirugía
Tumor de pared	Cirugía
Estadio IIIb	Radioterapia y quimioterapia
Estadio IV	Paliativo
Carcinoma de células pequeñas	
Enfermedad localizada	Radioterapia y quimioterapia
Enfermedad extendida	Quimioterapia

*Para una explicación más detallada y para la exposición de otras situaciones o excepciones, véase el texto.

Câncer do pulmão

Tratamento

Carcinoma de pequenas células

Quimioterapia e/ou radioterapia

Ressecção ? + Quimioterapia (T1NO, T2NO)

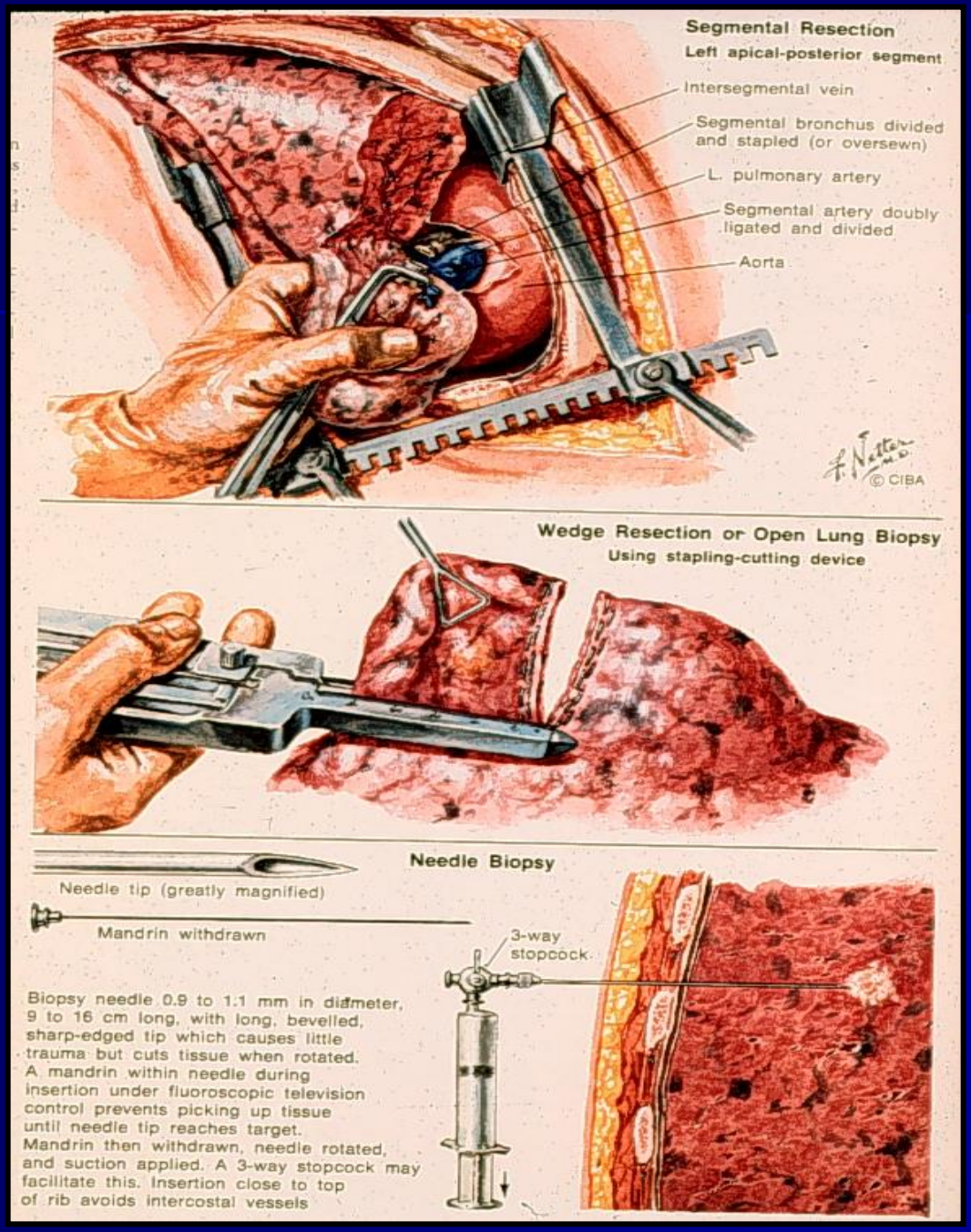
Demais carcinomas

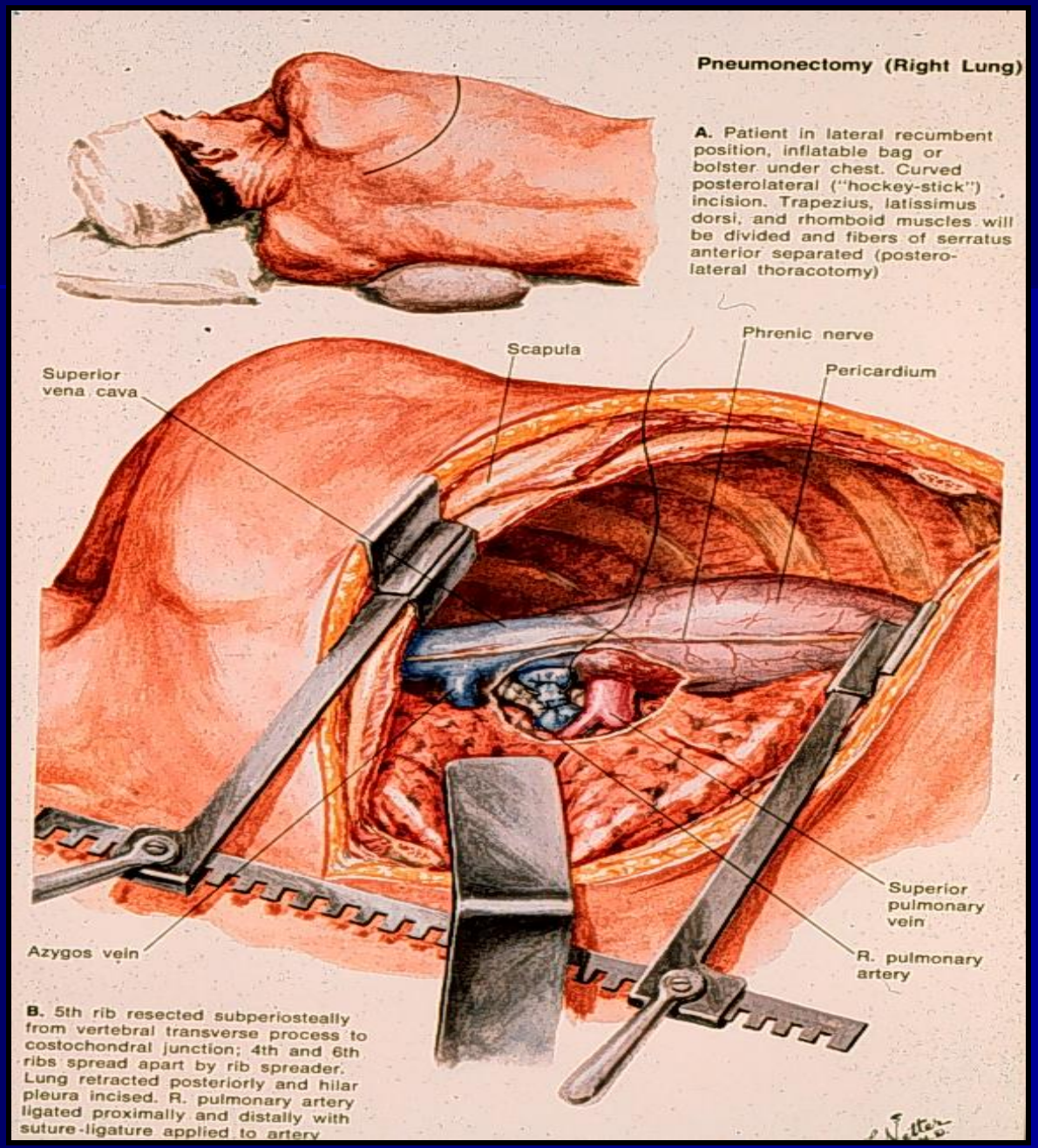
Ressecção pulmonar – estágios I, II, e IIIa

Quimioterapia e/ou radioterapia adjuvante?

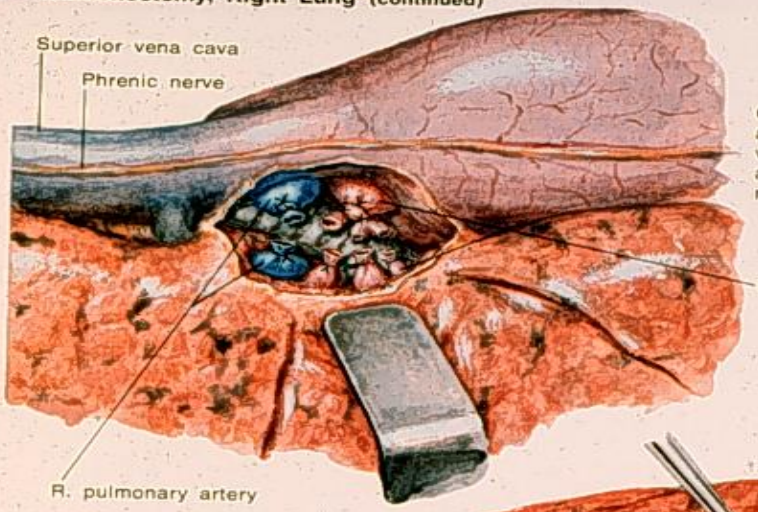
Como operar

1. Remoção completa do tumor e sua drenagem linfática intrapulmonar (pneumonectomia ou lobectomia)
2. Boa margem de segurança no coto brônquico
4. Linfadenectomia mediastinal (estadiamento)


Segmental Resection
Left apical-posterior segment
Intersegmental vein
Segmental bronchus divided and stapled (or oversewn)
L. pulmonary artery
Segmental artery doubly ligated and divided
Aorta
F. Netter M.D.
© CIBA
Wedge Resection or Open Lung Biopsy
Using stapling-cutting device
Needle Biopsy
Needle tip (greatly magnified)
Mandrin withdrawn
3-way stopcock
Biopsy needle 0.9 to 1.1 mm in diameter, 9 to 16 cm long, with long, bevelled, sharp-edged tip which causes little trauma but cuts tissue when rotated. A mandrin within needle during insertion under fluoroscopic television control prevents picking up tissue until needle tip reaches target. Mandrin then withdrawn, needle rotated, and suction applied. A 3-way stopcock may facilitate this. Insertion close to top of rib avoids intercostal vessels


Pneumonectomy (Right Lung)
A. Patient in lateral recumbent position, inflatable bag or bolster under chest. Curved posterolateral ("hockey-stick") incision. Trapezius, latissimus dorsi, and rhomboid muscles will be divided and fibers of serratus anterior separated (postero-lateral thoracotomy)
Phrenic nerve
Scapula
Pericardium
Superior vena cava
Superior pulmonary vein
R. pulmonary artery
Azygos vein
B. 5th rib resected subperiosteally from vertebral transverse process to costochondral junction; 4th and 6th ribs spread apart by rib spreader. Lung retracted posteriorly and hilar pleura incised. R. pulmonary artery ligated proximally and distally with suture-ligature applied to artery

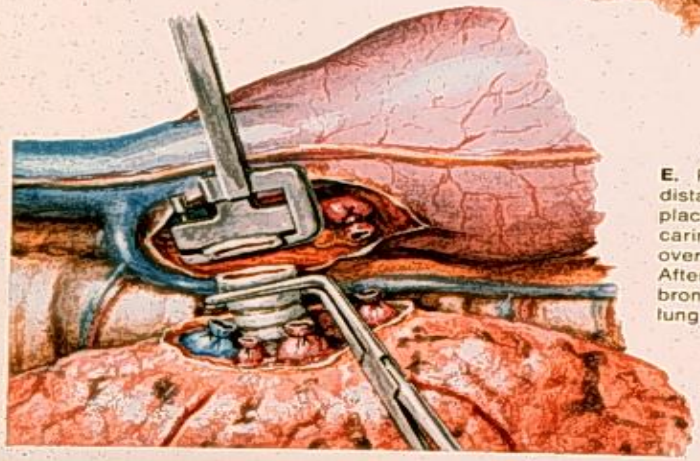
Pneumonectomy, Right Lung (continued)



C. R. pulmonary artery and superior pulmonary vein divided after ligature and suture-ligature, exposing r. main bronchus

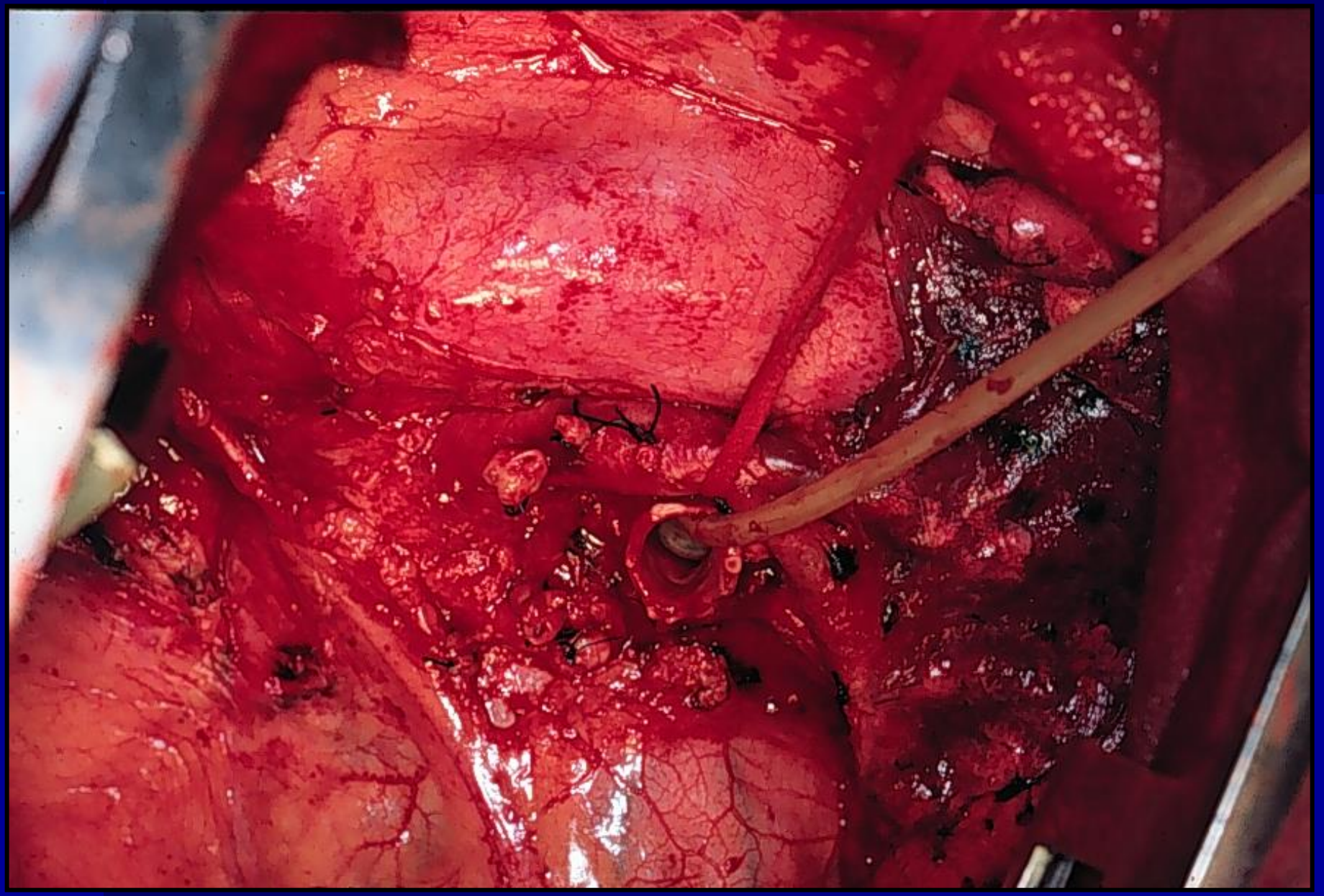
Superior pulmonary vein

D. Lung retracted superiorly, pulmonary ligament incised, exposing inferior pulmonary vein, which has been ligated and suture-ligated preparatory to division

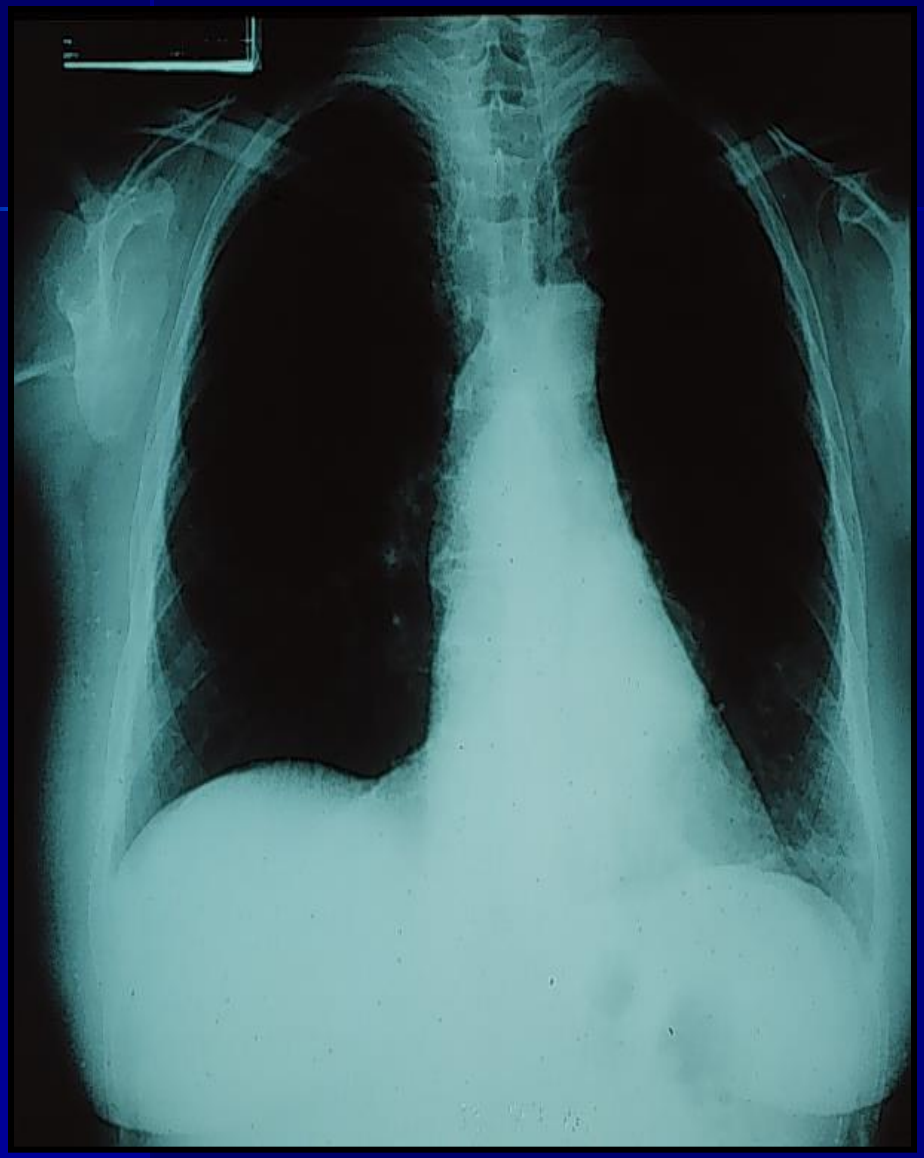


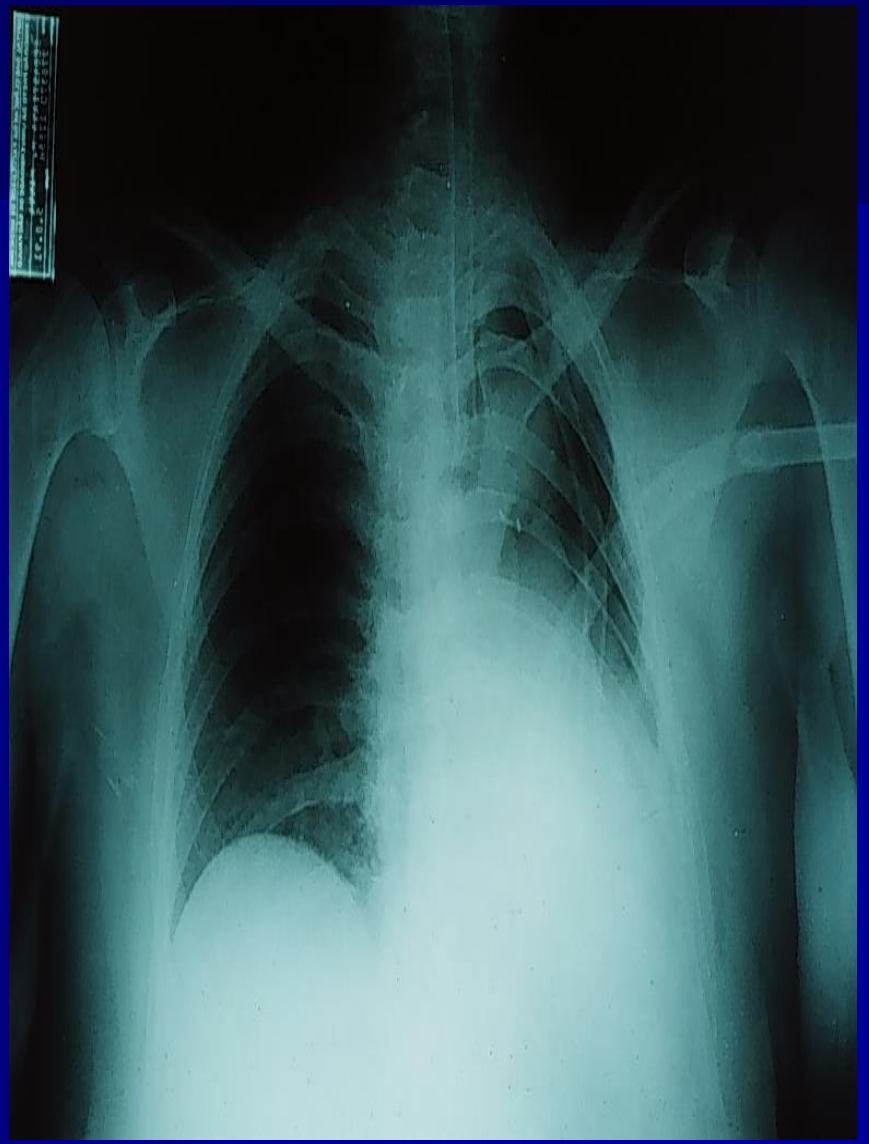
E. R. main bronchus clamped distally and stapling device placed across it, close to carina (or is closed by over-end, nonabsorbable sutures). After driving staples home, bronchus is divided and lung removed

F. Netter M.D.



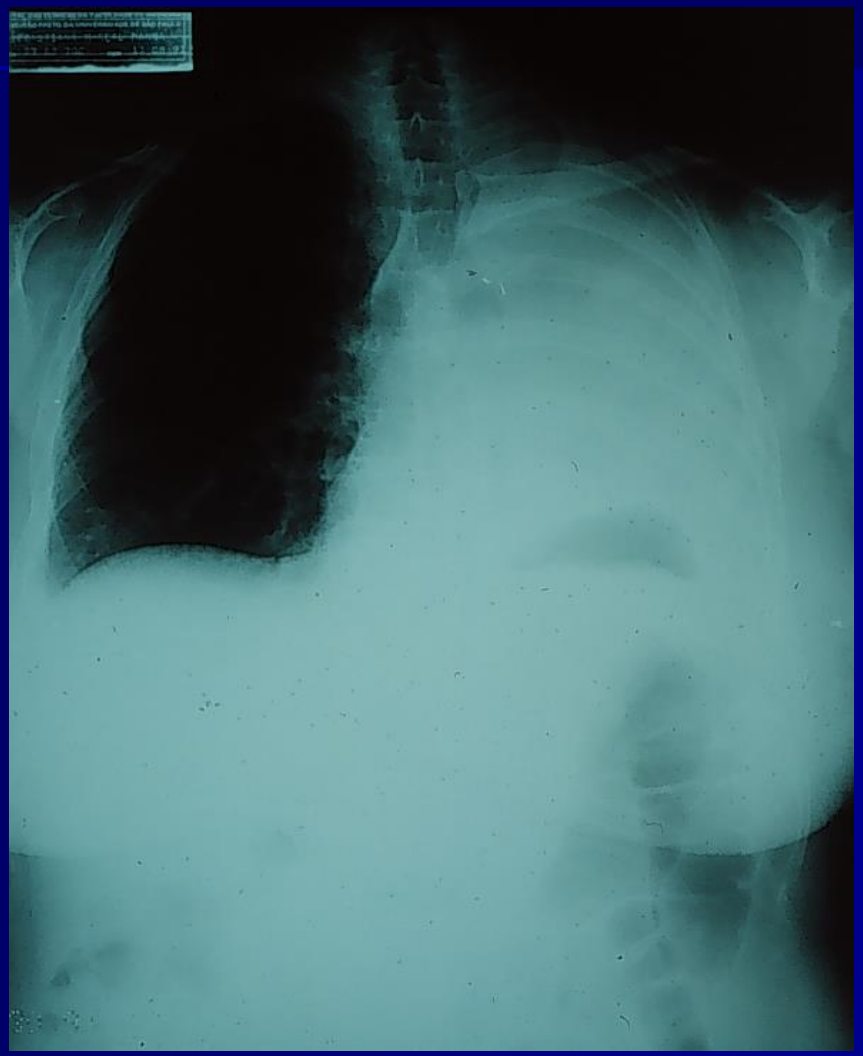
Pneumonectomia à esquerda





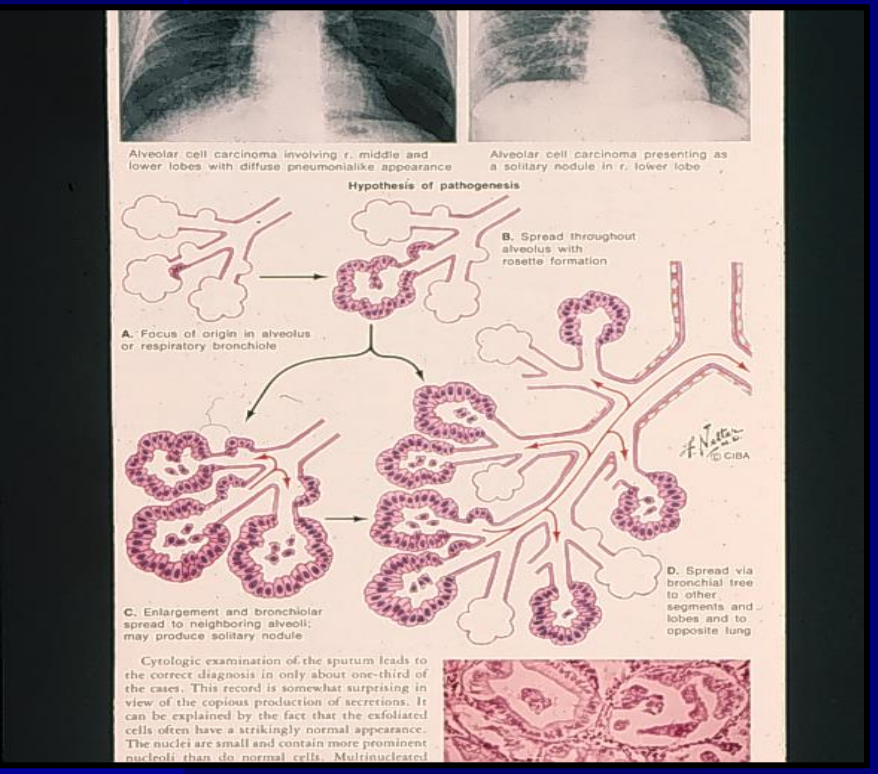
Pneumonectomia à esquerda

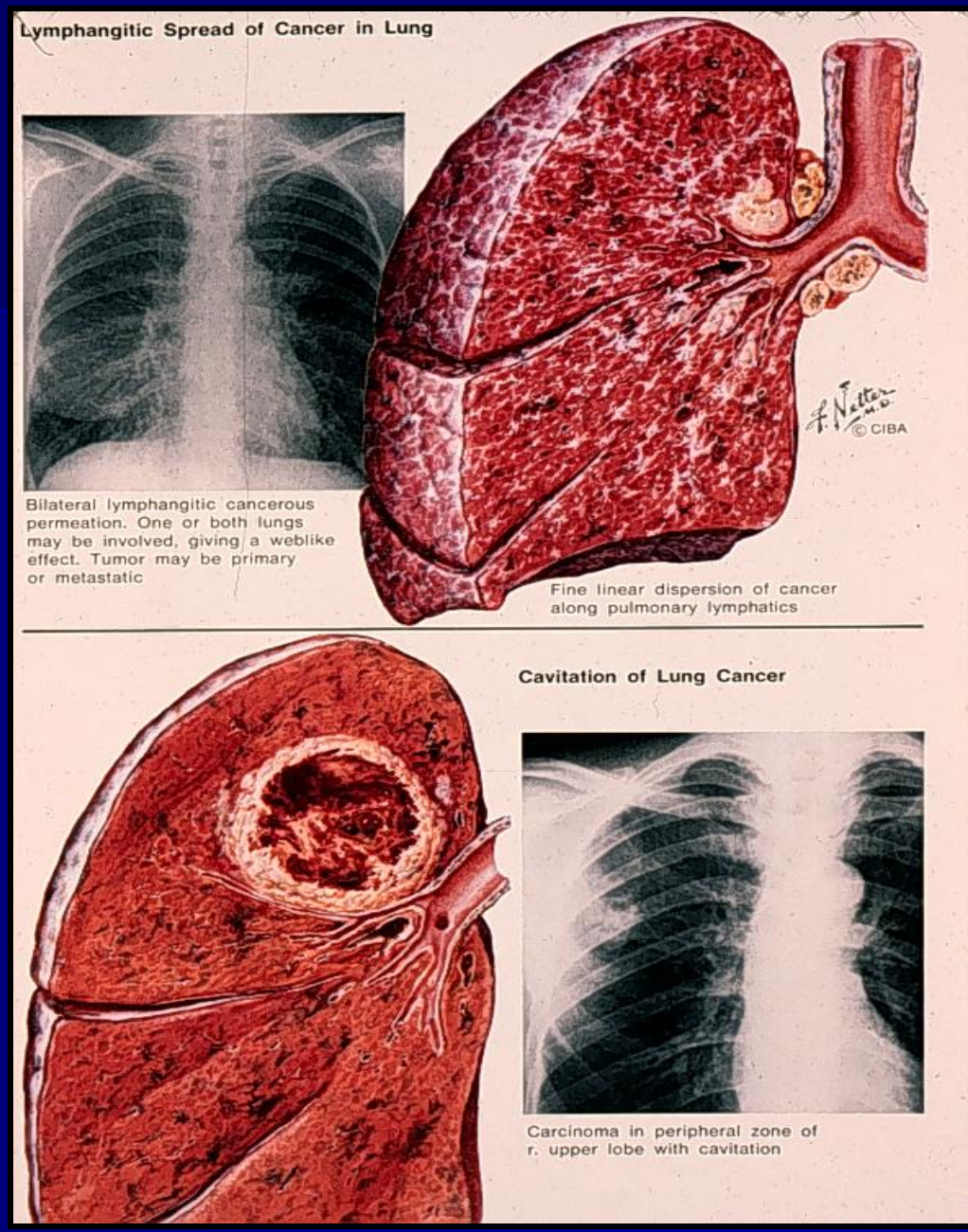
Tardio



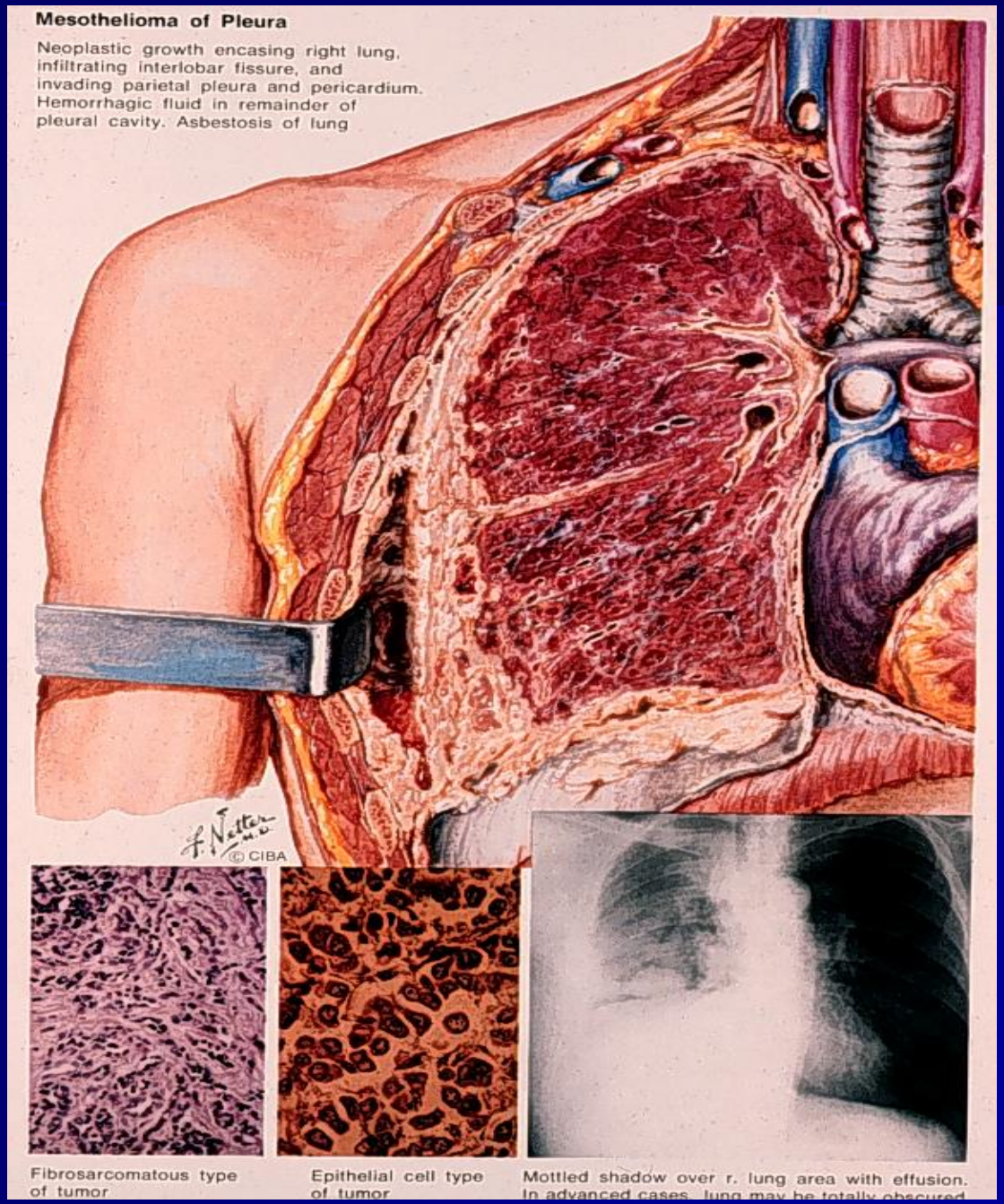
Outras tumores do pulmão

- Linfangite carcinomatosa
- Abscesso pulmonar
- Ca bronquíolo-alveolar





Mesotelioma pleural



Tumor de Pancoast

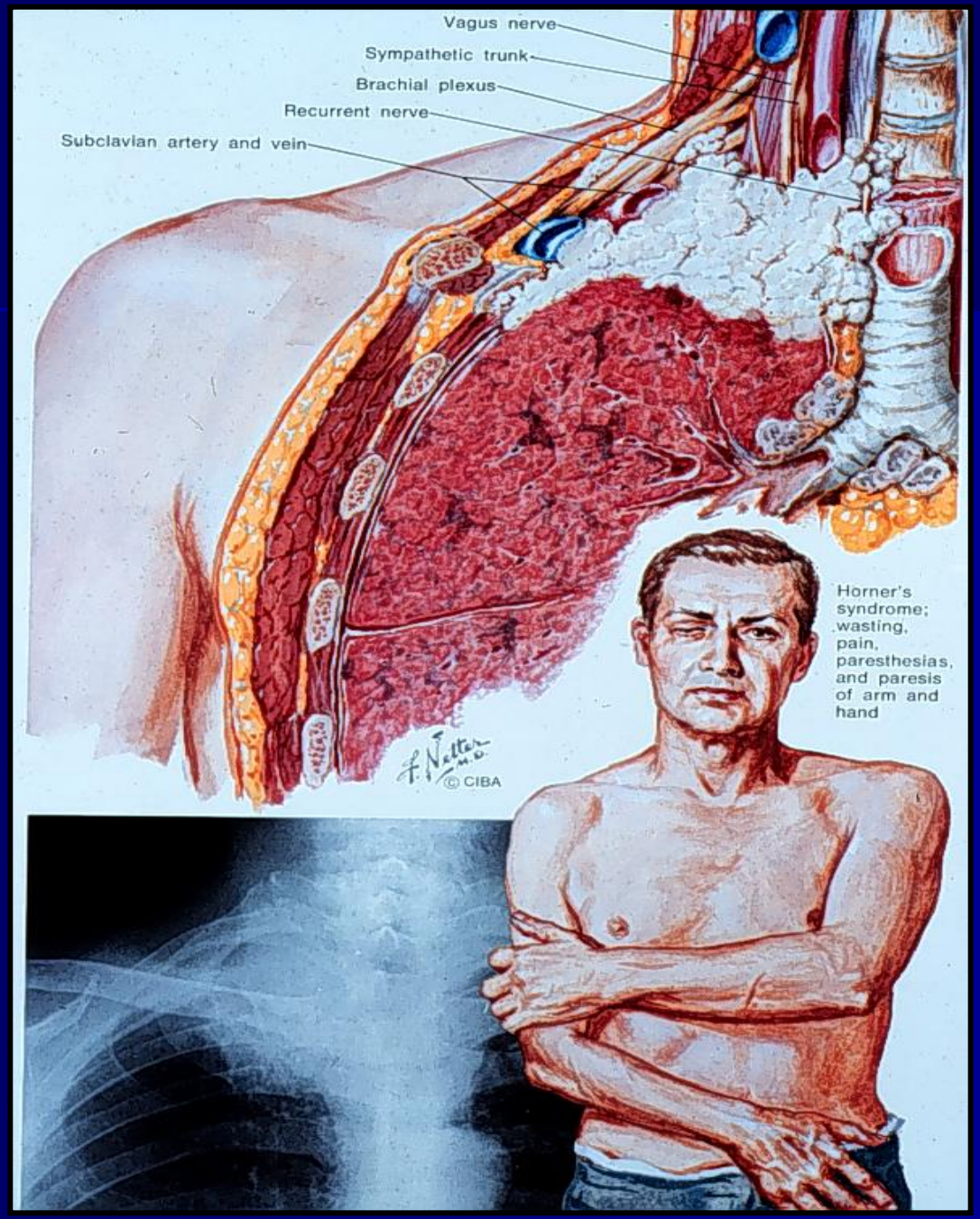
- **Síndrome de Pancoast** Delaney e Nielsen 2000

  1- Síndrome Tobias-Claude Bernard-Horner – invasão do simpático cervical – miose, enoftalmia e ptose palpebral

  2- Síndrome Déjérine-Klümpke – invasão ramos inferiores plexo braquial (T1) – dor e impotência do membro sup

  3- Erosão ou destruição arco costal posterior da costela sup

  "dor no ombro"


Vagus nerve
Sympathetic trunk
Brachial plexus
Recurrent nerve
Subclavian artery and vein
Horner's syndrome; wasting, pain, paresthesias, and paresis of arm and hand
F. Netter M.D.
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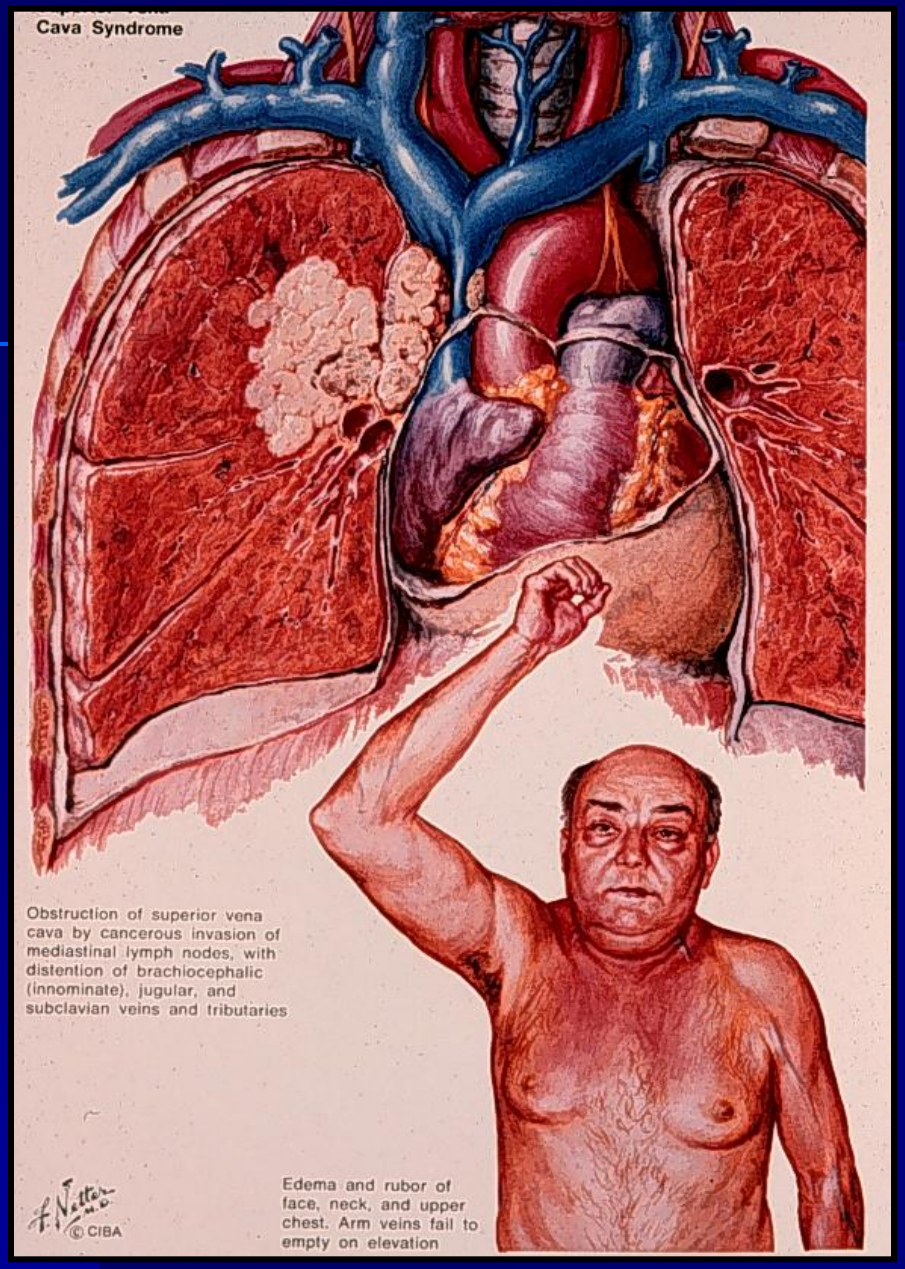
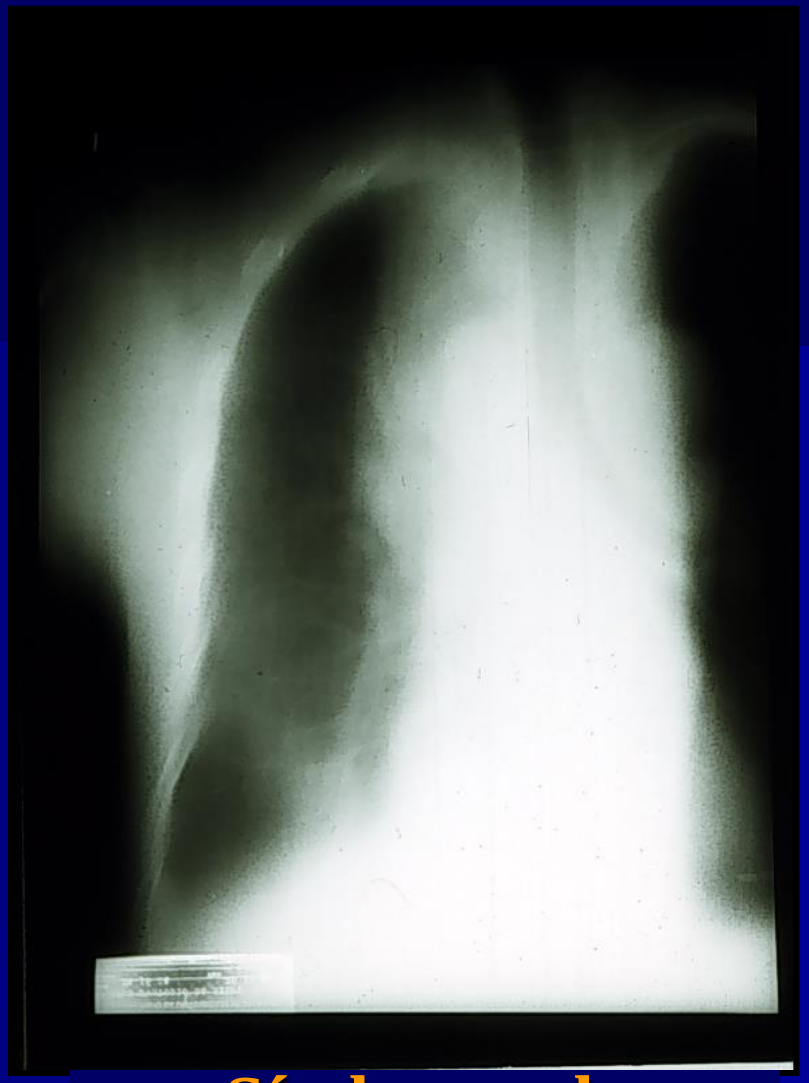
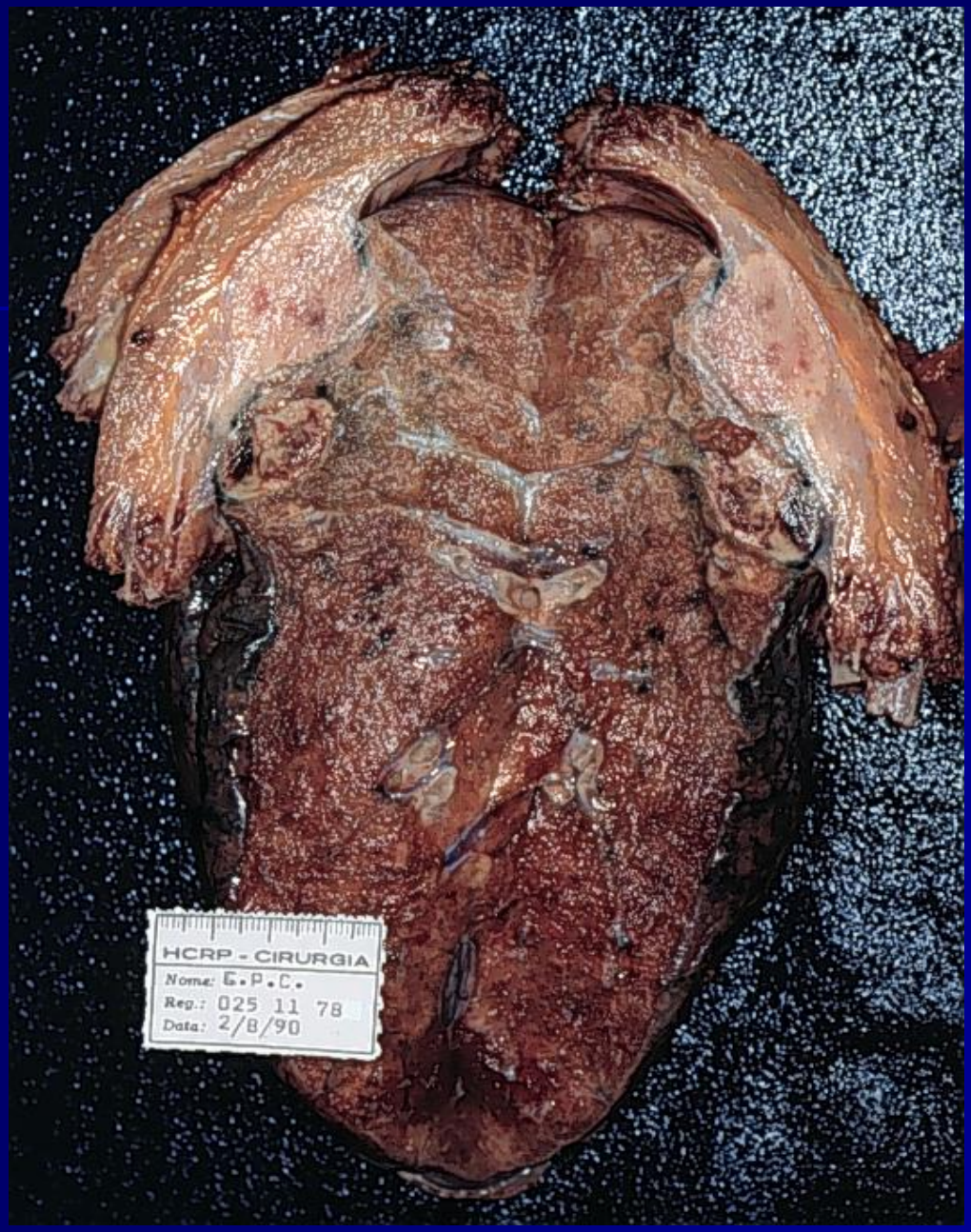




Síndrome de compressão/invasão

da veia cava superior


HCRP - CIRURGIA
Nome: G.P.C.
Reg.: 025 11 78
Data: 2/8/90

Síndrome Paraneoplásicas

Tipos

TABLA 5.42. Síndromes paraneoplásicos en el cáncer de pulmón

Manifestaciones generales
- Anorexia
- Pérdida de peso
- Caquexia
- Fiebre inexplicable
- Inmunodepresión

Síndromes endocrinos
- Síndrome de Cushing por secreción ectópica de ACTH
- Síndrome de secreción inadecuada de hormona antidiurética
- Síndrome de secreción inadecuada de hormona paratiroidea
- Síndrome de secreción inadecuada de hormona del crecimiento
- Ginecomastia

Síndromes esqueléticos
- Dedos en palillo de tambor

Síndromes neuromusculares
- Síndrome miasteniforme de Eaton-Lambert
- Trastornos cerebelosos
- Neuropatías periféricas
- Polimiositis

Síndromes vasculares y hematológicos
- Tromboflebitis *migrans*
- Coagulación intravascular diseminada
- Anemia

Manifestaciones cutáneas
- Dermatomiositis

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ÚLCERA DO ESTÔMAGO.

alcatrão: 8 mg, nicotina: 0,8 mg, monóxido de carbono: 11 mg


Nova embalagem.
O importante é ter Charm.
CHARM
CHARM
O MINISTÉRIO DA SAÚDE ADVERTE:
A NICOTINA É DROGA E CAUSA DEPENDÊNCIA.
alcatrão: 10 mg nicotina: 0,8 mg monóxido de carbono: 10 mg