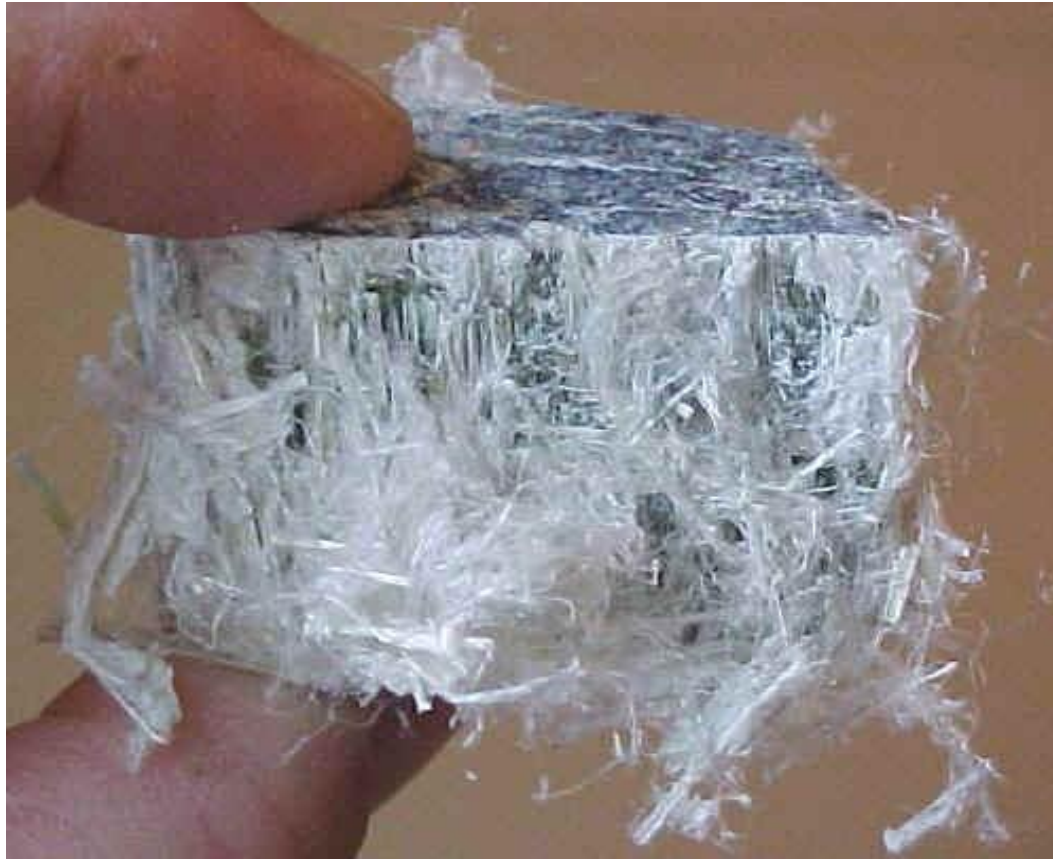


Asbest Niet best

M.Simson 26-04-2012



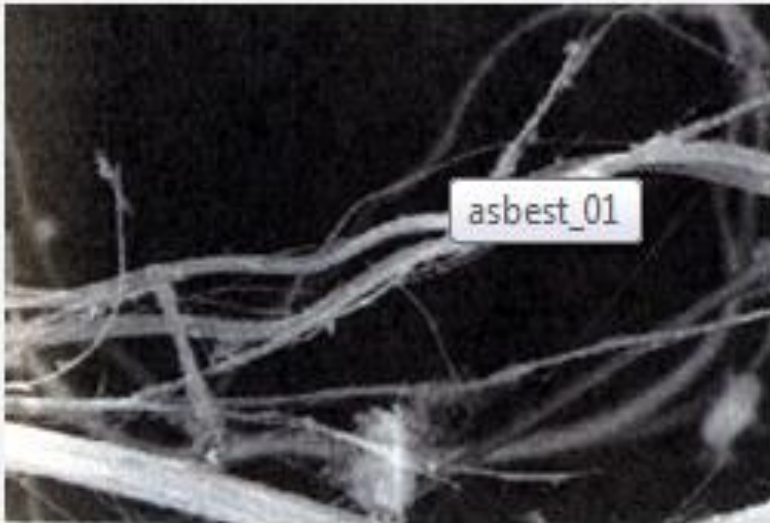
Asbest gerelateerde ziekten

- Benigne asbest gerelateerde pleurale afwijkingen
- Asbestose
- Mesotheliom
- Overige maligniteiten: oesofagus
maag
colon
pancreas

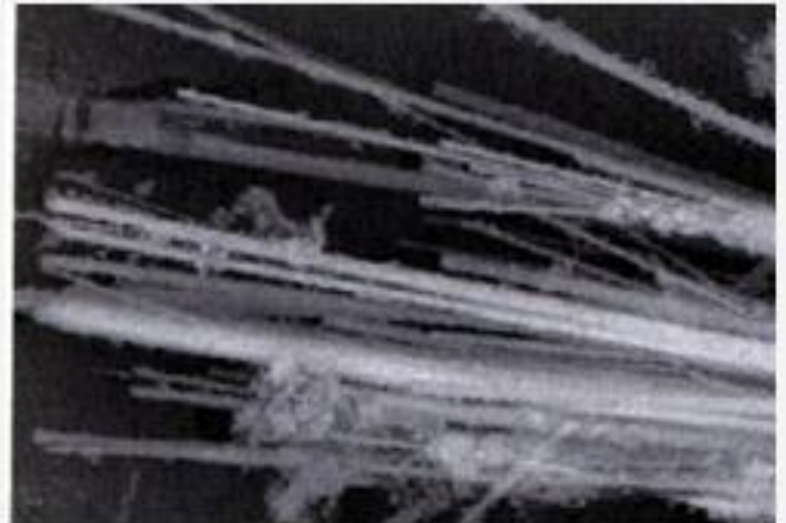
Asbestose

Causale factoren

- **Vezeltype:**
 - chrysotiele vezel
 - amfibole vezel



Serpentijnvezel (krulvormig)



Amfiboolvezel (naaldvormig)

Causale factoren

- Mate van/duur asbest expositie
- Tabak gebruik: ernst+mate progressie ↑
- Incubatie tijd: 20-40 jaar

How Asbestos fibers may endanger your health

1

When working with Asbestos containing material, fibers may be released into the air we breathe.

This is especially true when power tools are used such as drills and grinders or when we work with material in which the fibers are loosely bonded

2

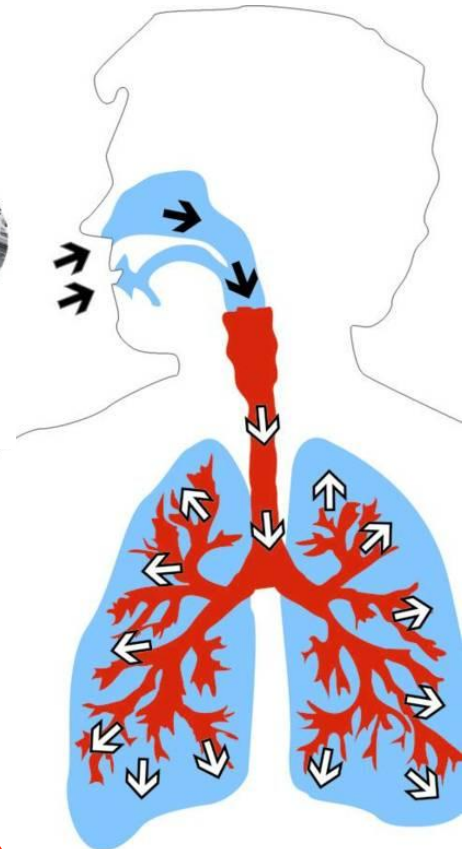
Asbestos fibers tend to break lengthwise.

3

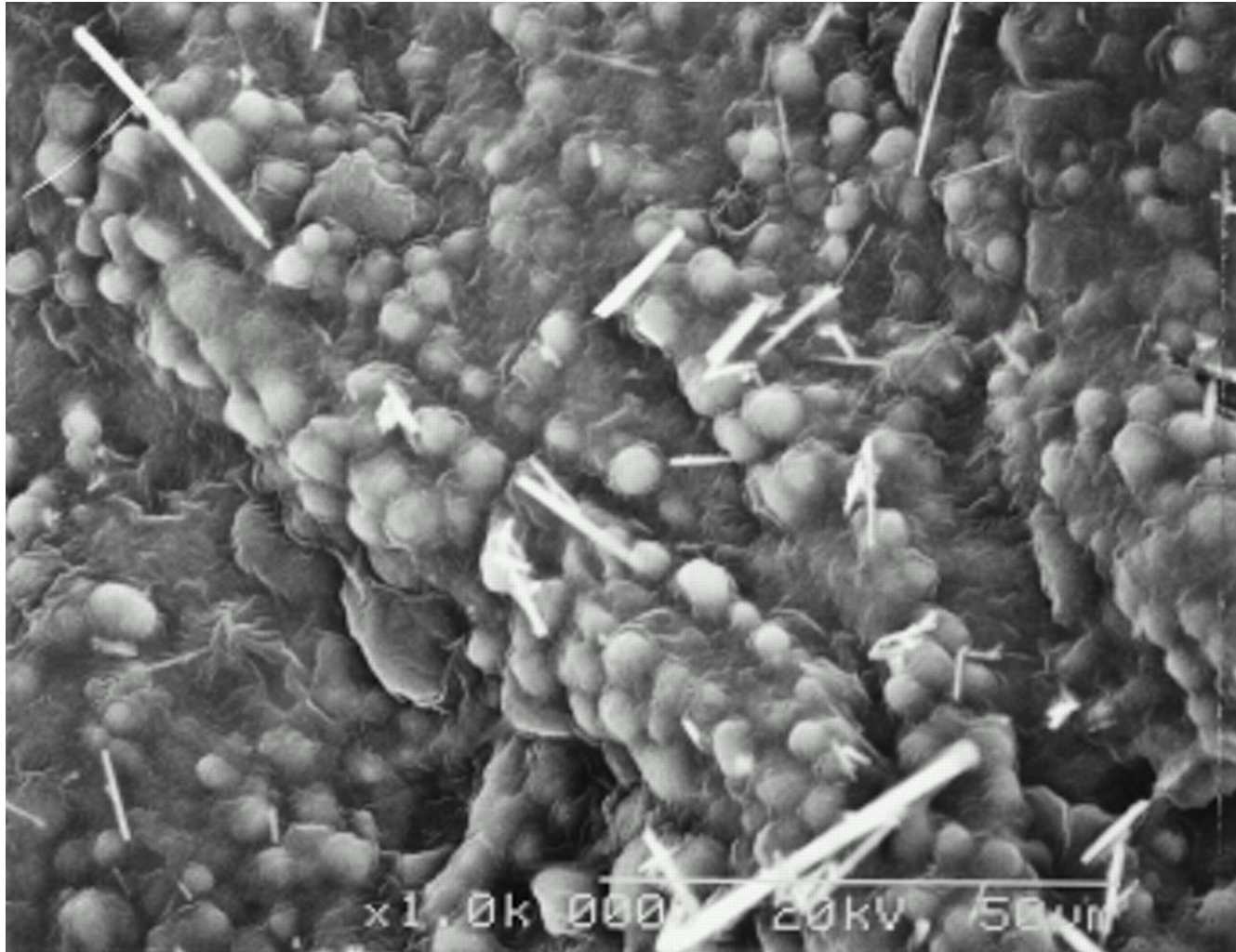
Asbestos fibers reach even the deepest regions of the lung.

Asbestos fibers longer than 5 micron and thicker than 3 micron are persistent inside the lungs. The lung clearing mechanism (phagocytosis) is not effective. The fibers can stay in the lung for decades and may even end up in the pleura or abdominal membrane.

4



Electron micrograph showing binding of asbestos fibers to epithelial surface after smoke exposure for 24 h.

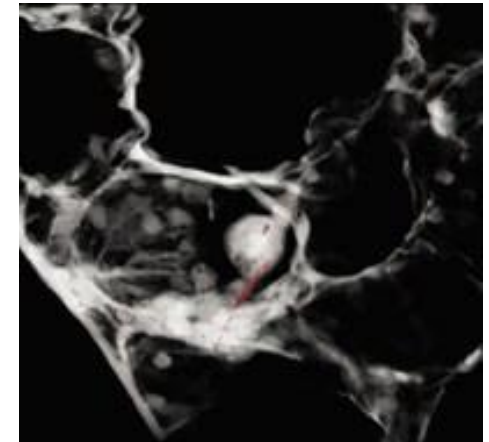
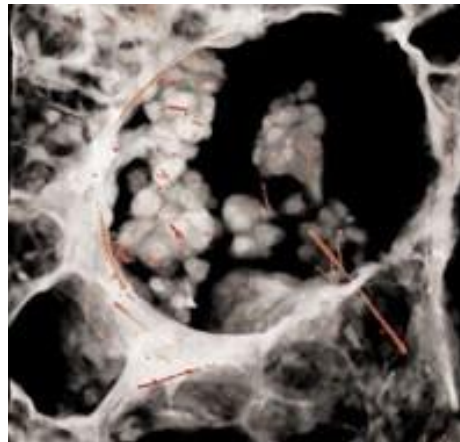


Churg, A. et al. Am J Physiol Lung Cell Mol Physiol 275: L502-L508 1998

Airborne asbestos fibres

- Only asbestos fibres of a certain dimension are hazardous. These are:
 - less than $1\ \mu\text{m}$ in diameter (a micrometer is one thousandth of a millimetre); and
 - are longer than $5\ \mu\text{m}$
- Asbestos not meeting these dimensions are removed by the body's natural defensive mechanisms

Asbestos fibers (left)—long, thin, flexible, and durable—reach the deep lung and spear airway walls. Macrophages try to envelope and dissolve them (right), but the fibers are too long to be enclosed completely. Damaging enzymes and oxidants secreted by the macrophage leak out along the fiber and damage nearby lung tissue.
Source: Harvard Magazine May June 2005



Symptomen

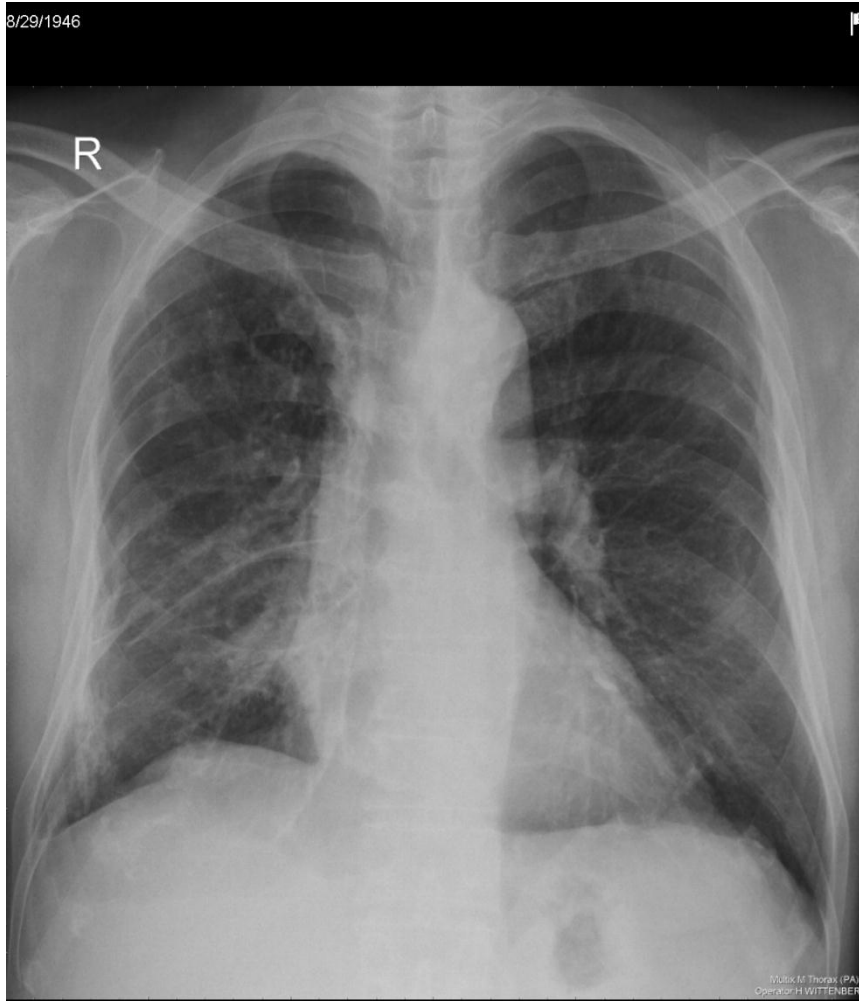
- A-symptomatisch
- Dyspneu: acuut ontstaan
langzaam progressief
- Niet-productieve hoest
- Dorsobasaal inspiratoir crepiteren
- Clubbing
- Cor pulmonale

Diagnostiek

- Significante asbest expositie en passende incubatie tijd
- X-thorax: - bilat symm reticulo-nodulair beeld
 - honeycombing
 - pleurale verdikkingen/plaques
 - verkalkingen(diafragma)
- Pleurale effusie: unilateraal minimaal
- (HR)CT
- Long-functie : restrictie / obstructie

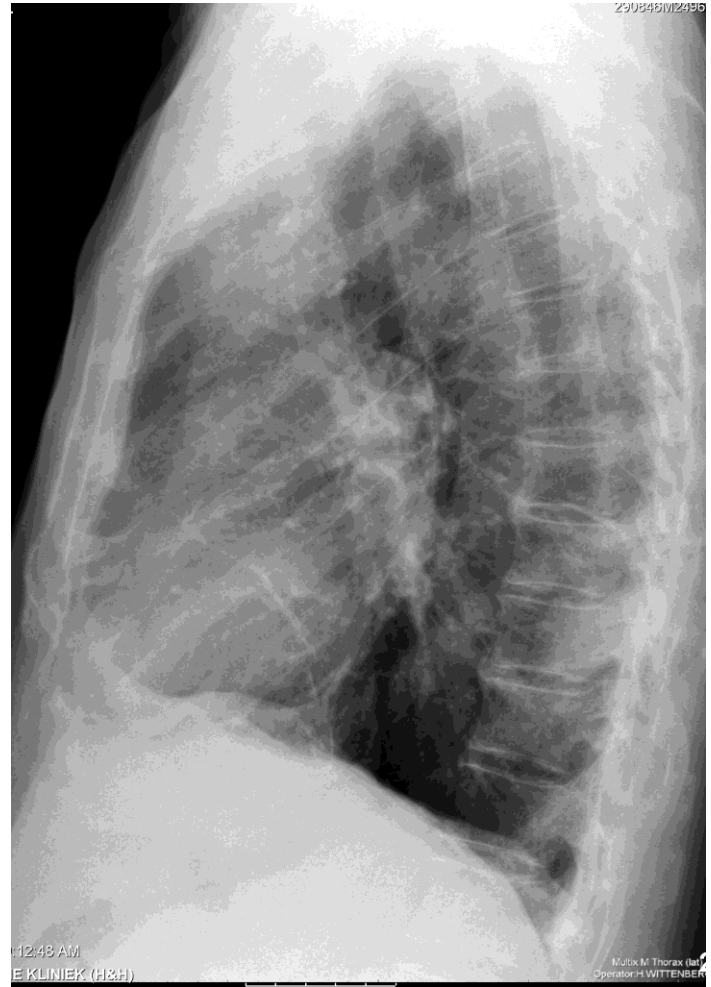
8/29/1946

R



M. J. M. Thorex (PA)
Operator: H. WITTENBERG

29024512335



12:48 AM
E. KLINIEK (H&H)

M. J. M. Thorex (L)
Operator: H. WITTENBERG

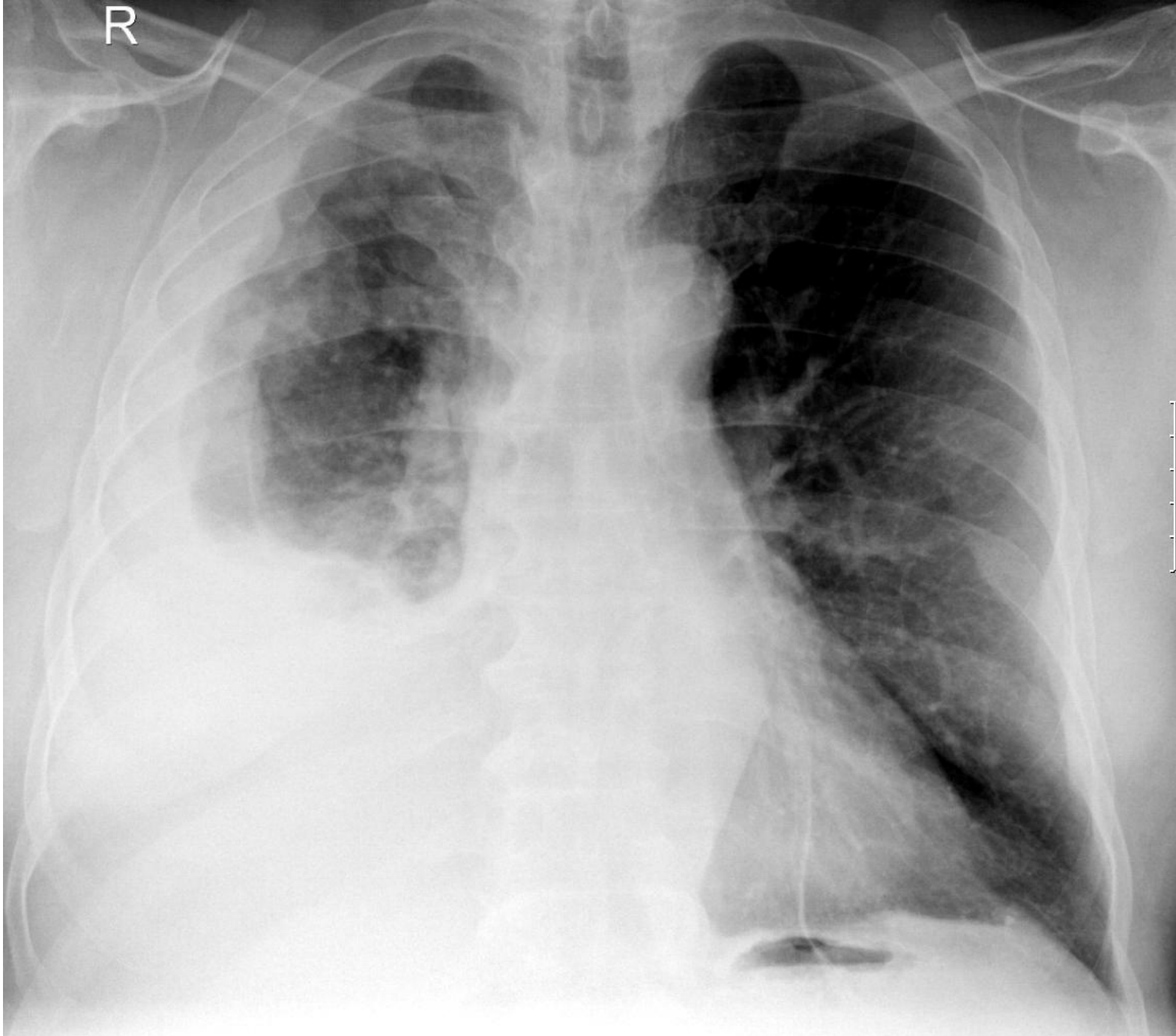
Therapie

- Geen therapy of choice
- Ondersteunend:- O2 suppletie
 - Stoppen met roken

Maligne mesothelioom

- 71 jr man → analyse cardiologie ivm dyspneu en thoracale pijn
- VG: roken+++
gepensioneerde Suralco
- ECHO cor: geen afwijkingen
- DD: Longembolien. Start Heparine iv

R



- Pleurapunctie waarna afname dyspneu en pleuravocht
- Pleuravocht: Kweek / ZN negatief
PA → Lymfocytose, gn maligne cellen
- Verwijzing via SEH: Dyspneu+↑Pleuravocht
- CT-thorax: beeld passende bij mesothelioom
- Pleurabiopt: geen maligniteit
- Respiratoire insufficiëntie → dood
- Vermoedelijke diagnose: Mesothelioom

Maligne mesotheliom

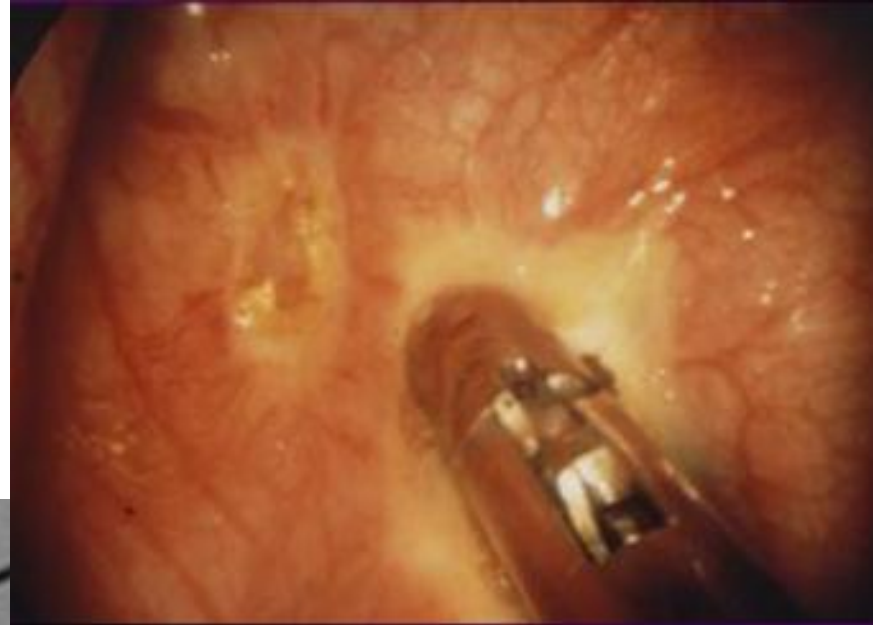
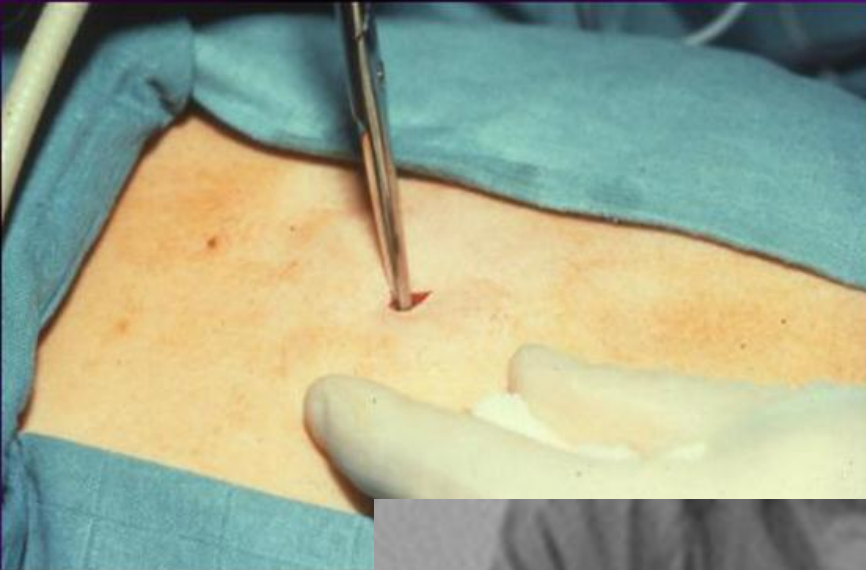
- Maligniteit uitgaande van mesothelium (pleura, pericard, peritoneum) a.g.v. Asbest expositie
- Histologisch type: epitheliaal + sarcomateus
- Asbestose / pleurale plaques → ↑risico mesotheliom
- Andere oorzaken mesotheliom:
Erioniet, fluoro-edeniet, radiotherapie, keramische vezels
- Incubatie tijd: 40 jr

Klinisch beeld

- Thoracale pijn
- Dyspneu
- Gewichts verlies
- Vermoeidheid
- Unilaterale pleurale effusie
- Paraneoplastische syndromen z.a. DIS

Diagnostiek

- X-thorax en CT-thorax
- Pleuravocht analyse (sensitiviteit 32-84%)
- Pleurabiopt middels thoracoscopie
- Stadiering middels TNM classificatie



Therapie

- Pleurodese
- Radiotherapie
- Chirurgie
- Chemotherapie
- Algemene maatregelen

**“Pas op asbest
langzaam rijden”**



