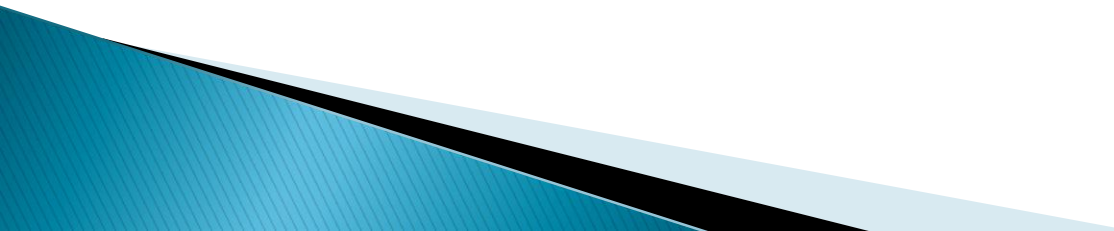


The Occupational Health Residency Program

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Overall view

- ▶ Two year program
 - ▶ Nine month theoretical course
 - ▶ Sixty hours per week
 - ▶ One month vacation per year
 - ▶ Twenty two stages
- 

First year schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
8am–12pm	Stage	Stage	Stage	Stage	staff meeting
1pm–5pm	Stage	Stage	Stage	Stage	Ambulatory
7pm–10pm	CEMT	CEMT	CEMT	CEMT	

First year stages

Dermatology

ENT (otorhinolaryngology)

Ophthalmology

Rheumatology

Orthopedics

Physiatry

Psychiatry

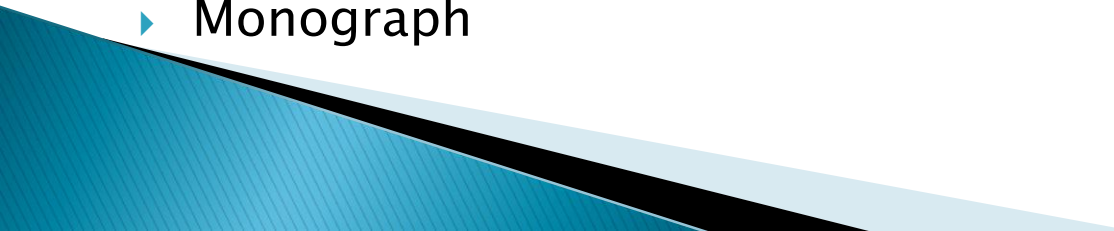
Pulmonology

Neurology

Emergency surgery

Clinical emergencies

CEMT disciplines

- ▶ Introduction
 - ▶ Occupational hygiene (1,2 and 3)
 - ▶ Occupational safety
 - ▶ Environmental sanitation
 - ▶ Industrial processes
 - ▶ Toxicology
 - ▶ Occupational diseases (1,2,3 and 4)
 - ▶ Ergonomics
 - ▶ Social security law
 - ▶ Labor expertise
 - ▶ Health service organization for workers
 - ▶ Safety and health of the rural worker
 - ▶ Health, work and gender
 - ▶ Tracts and systems
 - ▶ Research methodology
 - ▶ Monograph
- 

Second year schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
8am–12pm	Stage	Funda centro	Stage	Stage	Staff meeting
1pm–5pm	Stage	Stage	Stage	Stage	Ambulatoty

Second year stages

AVAPE

ASSESSO

DPME

INSS

CRST

SESMT

Pandurata

Clinica del lavoro

Bioqualynet

Fleury

To be scheduled

Cana Brava Mine, Minaçu-GO



Cana Brava Mine, Minaçu-GO



SAMA, Minaçu-GO



Sugar cane farm, Iracemápolis-SP



Iracema plant, Iracemápolis-SP



Iracema plant, Iracemápolis-SP



Iracema plant, Iracemápolis-SP



Rede Globo, São Paulo-SP



Construction Site, São Paulo-SP



Cases

Occupational Diseases Ambulatory

Case 1

Identification

- ▶ JSSF, 34 years old, black, male, unemployed construction worker, born in Poções-BR, resides in São Paulo-SP, catholic, single.

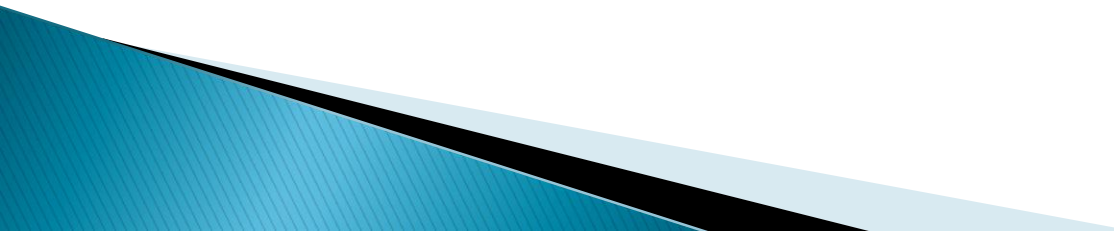
Complaint

- ▶ Cough with blood for two years.

History of the disease

- ▶ Patient refers that for the last two years he has been feeling breathlessness and has also been coughing small amounts of blood specially in the morning. He also said that for the last three months he has been having night sweats, fever, weight loss and that the amount of blood on his sputum has increased. He sought for clinical aid and due to the severity of his disease he was sent to Santa Casa's pneumology department for treatment. He was diagnosed with tuberculosis and due to his occupational history he was sent to the occupational diseases ambulatory for investigation with the hypothesis of silicotuberculosis.

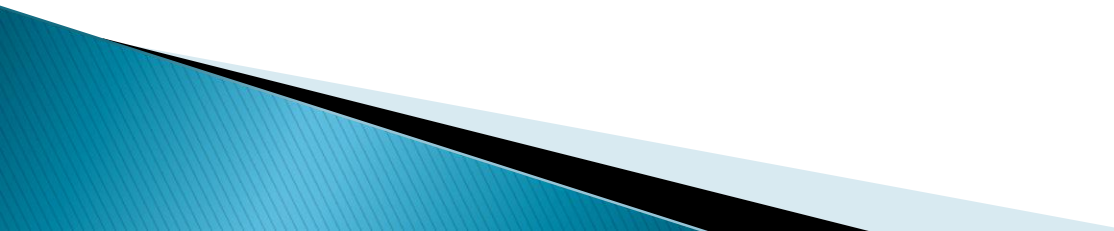
Occupational history

- ▶ From 1994 to 1996 the patient worked for a flooring construction firm. On that job one of his duties was to dust the recently applied resin with quartz powder. That process used to be done without proper ventilation measures and with the worker wearing a mask similar to those used in surgery rooms. There was no occupational health service on that firm. The firm went bankrupt in 2002.
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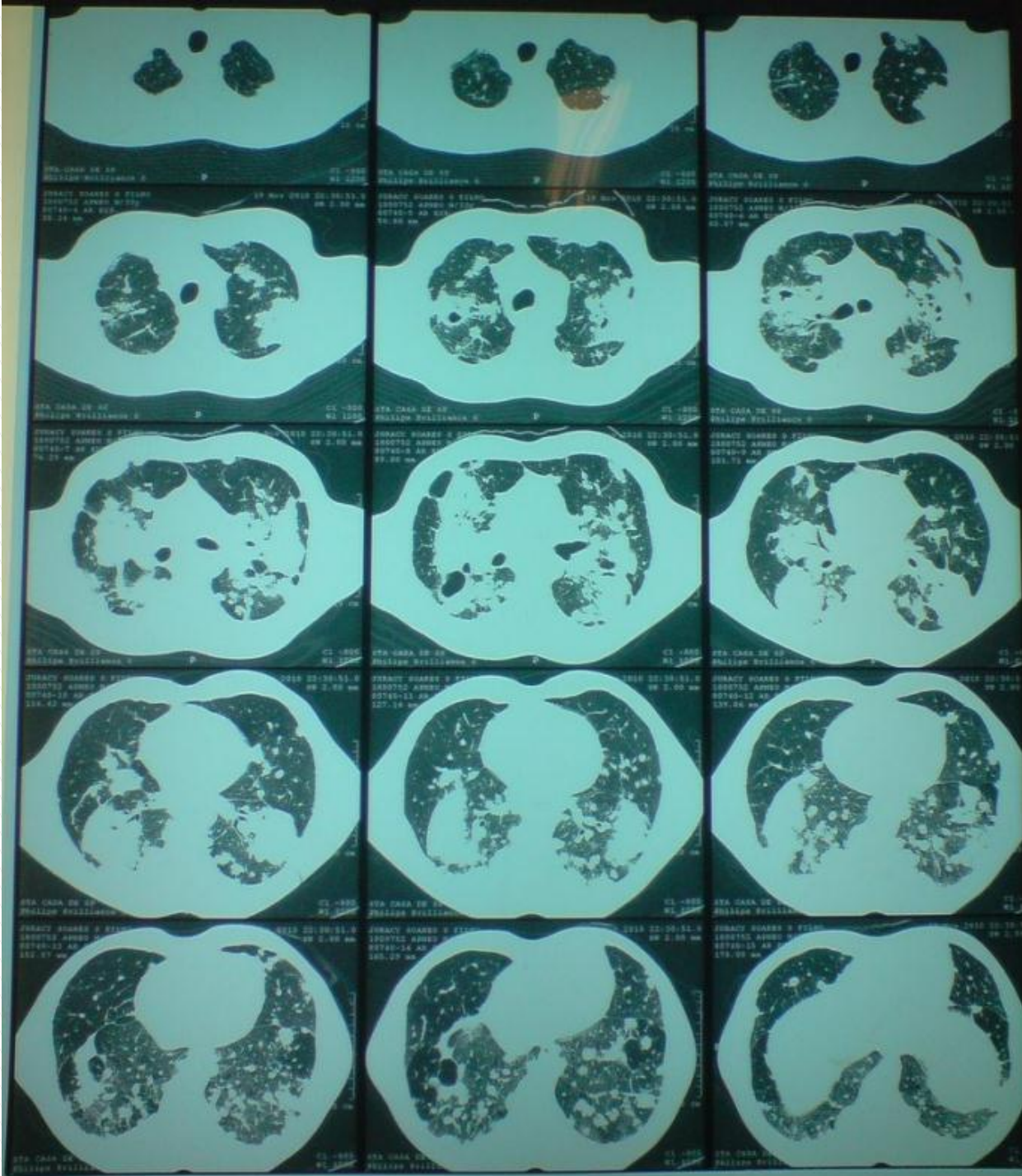
Physical examination

- ▶ Chest wheezing and bilateral basal-end inspiratory crepitations.

Subsidiary tests

- ▶ X-ray;
 - ▶ Computed tomographic scanning;
 - ▶ Lung function test;
 - ▶ Fibreoptic bronchoscopy;
 - ▶ Transbronchial biopsy;
 - ▶ Bronchial lavage.
- 







Spirometry

	Before	after
FEV1	3,28 (71%)	2,91 (63%)
FVC	1,63 (42%)	1,51 (38%)
FVC/FEV1	0,50 (59%)	0,52 (61%)

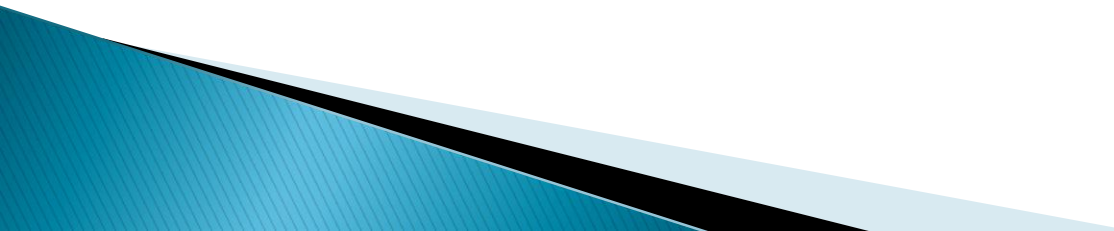
Fibreoptic bronchoscopy

- ▶ Compatible with normality.
- ▶ Transbronchial biopsy and bronchial lavage were performed.

Biopsy

- ▶ Chronic granulomatous inflammatory process with no evidence of necrosis on bronchus. Negative for tubercle bacilli, negative for fungus, negative for crystals and negative for fibers.

Conclusion

- ▶ Due to signs, symptoms, occupational history, radiological and spirometrical findings the diagnose of silicotuberculosis was made and the proper occupational measures were taken.
 - ▶ The patient is currently receiving social security benefits and is also waiting for a lung transplant.
- 

Case 2

Identification

- ▶ JFB, 55 years old, white, male, born in Santo André, residing in São Paulo-SP, carpenter, catholic, single.

Complaint

- ▶ Right shoulder pain for six months.

History of the disease

- ▶ Patient refers that for the last six months he has been feeling shoulder pain and has not gotten relief despite physiatrical treatment for impact syndrome (CID-10: M75.4). He was then sent to the occupational disease ambulatory for investigation regarding his job and the possible relation between it and his illness.

Occupational history

- ▶ Works from 7 am to 5 pm reforming wooden load stands. He uses as work tools one hammer, one electric saw, one lever, nails and wood. He does not make use of any individual safety equipments.

Physical examination

- ▶ Mild tenderness over the right humeral head and discomfort on abduction at about 80°.

Workplace inspection



Workplace inspection



Workplace inspection



Workplace inspection



Workplace inspection



Conclusion

- ▶ It was not possible to say that the disease was caused by the occupation however it was possible to say that the work was aggravating his condition and therefore preventive measures should be taken, such as:
 - Carrying the wooden load stands below the shoulder;
 - Not carrying it by himself;
 - Use of pneumatic hammer;
 - 10 minute breaks every hour;
 - Change the electric saw for a lighter model.

Case 3

Identification

- ▶ JTA, 50 years old, white, male, shoemaker, born in Patos–PB, residing in São Paulo–SP, married, catholic.

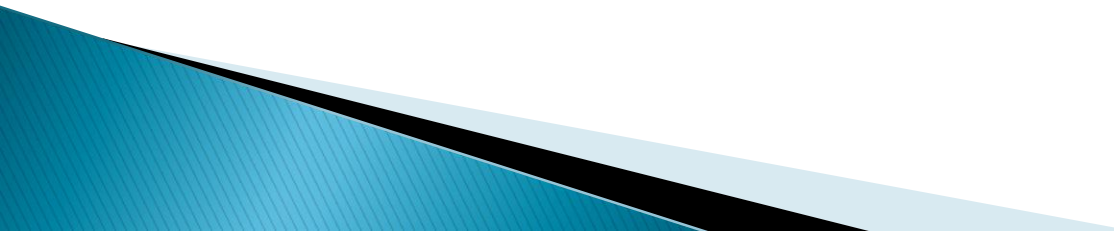
Complaint

- ▶ Neck, forearms and hands skin injuries for one year.

History of the disease

- ▶ Patient refers that has been one year since he developed itchy, erosive skin injuries located mostly in neck, forearms and hands. He was sent to the occupational disease ambulatory by the dermatology department with a patch test positive for tiuram-mix and quinolina. The hypothesis of allergic contact dermatitis was confirmed but was not healing properly despite the treatment. So the dermatologist required occupational evaluation.

Occupational history

- ▶ Patient works as a shoemaker on a small shoe factory specialized in making boots. He has been working at this firm for ten years, from Monday to Friday, from 8 am to 6 pm with a pause of one hour for lunch. He does not use any individual safety equipment because they make his job more difficult to be accomplished he says.
- 

Physical examination

- ▶ Eczema located in hands (palm and back), wrists, forearms and neck.

Workplace inspection



Workplace inspection



Workplace inspection



Workplace inspection



Workplace inspection



Workplace inspection



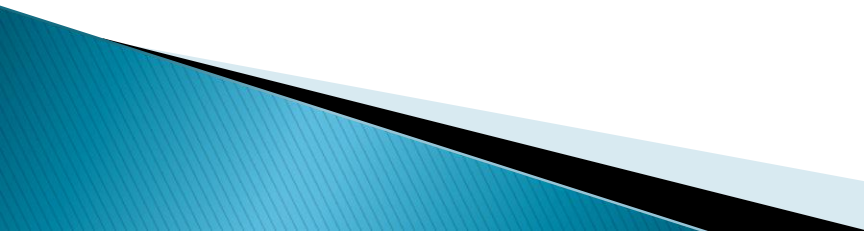
Workplace inspection



Workplace inspection



Conclusion

- ▶ Work related allergic contact dermatitis due to rubber exposure.
 - ▶ The patient should no longer have contact with rubber therefore he must be relocated to a rubberfree environment.
 - ▶ Long sleeve uniform, trousers, gloves and boots should be provided to the workers by the employer.
 - ▶ A more efficient ventilation system should be installed on the areas where rubber is sanded.
- 

Case 4

Identification

- ▶ SAF, 54 years old, male, brown, born in Teixeira de Freitas–BA, residing in Taboão da Serra–SP, construction worker, catholic, married.

Complaint

- ▶ Skin itching for 15 years.

History of the disease

- ▶ Patient refers itchy, erosive, skin injuries, located in forearms and chest, that come and go, for 15 years. He relates the surge of the injuries to cement exposure at work. The patch test was positive for potassium bichromate. He was sent to the occupational diseases ambulatory for investigation and prevention.

Occupational history

- ▶ Patient works at an enterprise that provides construction services for the Prefecture of São Paulo. He works from 8 am to 5 pm with a one hour pause for lunch, from Monday to Friday. The patient works mainly on the maintenance of pluvial galleries. One of his duties is to prepare and transport a mixture of cement, sand and gravel. Patient uses long sleeve shirt, trousers, boots, helmet, auricular plugs and gloves for safety.

Physical examination

- ▶ Eczema in forearms, wrists and chest.

Workplace inspection



Workplace inspection



Workplace inspection



Workplace inspection



Workplace inspection



Workplace inspection



Conclusion

- ▶ Symptoms, signs, positive patch test for potassium bichromate and occupational exposure confirms the diagnosis. Preventive measures were recommended, such as:
 - Keep the use of individual safety equipments as it is;
 - Avoid contact with any substance containing potassium bichromate.

Case 5

Identification

- ▶ SMM, 53 years old, white, married, female, catholic, cook, born and residing in São Paulo-SP.

Complaint

- ▶ Breathlessness on exertion for about 2 years.

History of the disease

- ▶ Patient formerly diagnosed with elevated arterial blood pressure, type 2 diabetes, dislipidemia, coronary insuficiency, underwent coronary revascularization surgery in 2009. Ever since the surgery she feels dyspnoea whenever she does physical effort.

Occupational history

- ▶ Patient works at a public school from 7 am to 6 pm from Monday to Friday, with one hour for lunch. The job consists in washing vegetables, opening cans, fixing the meal, serving it as well, then washing the dishware, storing it afterwards, and last but not least cleaning the cafeteria. She does all that work helped by one colleague. They do the whole thing twice a day.

Physical examination

- ▶ Blood pressure = 140x95mmHg
- ▶ Lower limb edema

Workplace inspection



Workplace inspection



Workplace inspection



Workplace inspection



Conclusion

- ▶ The job is too heavy for a lady with history of coronary insufficiency and with symptoms of mild congestive cardiac failure (dyspnoea and limb edema), therefore it was recommended the transference to a different sector, such as the principal's office, where she could work as a secretary, for example.

São Paulo-SP



Thank you very much!

