

Answer to medical quiz: image 1

ANSWER

A pleural based lesion projecting from the left mid zone along with destruction of left fifth rib underneath the lesion and on the right side there is a plaque over the diaphragm. This could represent a localized pleural effusion, mesothelioma or metastatic malignancy and asbestos plaques.

DISCUSSION

Asbestos is often referred to as the 'Hidden Killer', as asbestos fibers are too small to see, have no warning signs like smell or taste and cancers elicited by asbestos are diagnosed decades after first exposure. Many patients who developed asbestos related cancer, especially women, were unaware that they had been exposed to a time-bomb with a very long fuse.¹The occupations most at risk for developing malignant mesothelioma after asbestos exposure include firefighters, construction workers, industrial and power plant workers and shipyard workers. These workers regularly handle asbestos-containing materials in high volumes. In the majority of cases of malignant mesothelioma, it is relatively straightforward to conclude on the basis of a patient's exposure history that asbestos was the cause, as mesothelioma is seldom elicited by other causes.^{2,3}There are many types of asbestos and asbestos materials imported in Bangladesh such as article fibre cement, corrugated cement sheets, asbestos panels, asbestos tiles, asbestos tubes, asbestos pipes

and pipe fittings and friction materials.⁴ A pilot study tested the feasibility of conducting occupational health research in Bangladesh while examining prevalence of asbestos-related diseases. In the 104 male ship breakers studied, prevalence of asbestos-related disease was 12 %, of which asbestosis accounted for 6%. Knowledge of asbestos and occupational health and safety measures were almost non-existent.⁵If no action is undertaken, the 'Silent Killer' will continue to affect the lives of a rapidly increasing number of people and generations thereafter.

REFERENCES

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Answer to medical quiz: image 2

ANSWER

1. MRI of brain, FLAIR/T2 sequence, showing diffuse, bilateral, ill-defined, irregular, patchy areas of homogeneous signal hyperintensities involving cortical and subcortical areas.
2. Acute disseminated encephalomyelitis (ADEM).
3. Encephalitis.
4. Cerebrospinal fluid (CSF) study.

DISCUSSION

ADEM is an immunologically mediated demyelinating disease triggered by a febrile illness or recent vaccination, eliciting an inflammatory response affecting the central nervous system. Possible mechanisms include either molecular mimicry or direct inflammatory damage to myelinated neurons.^{1, 2} The prevalence of ADEM is higher in children and young adults and is thought to be related to the increased frequency of viral infections and vaccination in this patient population.

There is no clear diagnostic criteria for ADEM in adults and therefore, older individuals are more difficult to diagnose. Standard ADEM therapies are high dose corticosteroids, intravenous immunoglobulin (IVIG) and plasmapheresis. It is suggested that high dose methylprednisolone administered early in the disease course should be used as the first line therapy, since up to 80% of patients are expected to have a full recovery. More advanced therapies such as IVIG and PLEX are usually reserved for refractory or more fulminant cases.³

REFERENCES

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