

STATUS OF DERMATOLOGY IN THE COAL BELTS OF EASTERN INDIA

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Health survey of 2 major coal mines in Eastern India reveals that skin lesions are very common. Out of usual skin lesions occupational dermatitis tops the list. Health statistics show that dermatological problems are the third major health hazard in mines.

Key Words : Health statistics, Dermatology

Introduction

Mining is considered as most hazardous industry and is deemed most dangerous peace time occupation in the country. With a team of medical personnels, in the month of January, 1994 for a period of 6 months, a clinical survey was conducted in 2 major coal mines in the Raniganj-Asansol Coal belt to evaluate the incidence of skin diseases among mine workers and its implications towards its occupation. Subjects chosen were blasters, loaders, drillers, trammers, pump operators and maintenance workers, mainly employed underground.

Various laws, regulations have been framed and enforced for the safety of the mines.

The underground miners get problems relating to dust, ventilation, illumination, noxious gases and noise and vibration due to blasts.

Materials and Methods

A survey was made on the mine workers treated at the colliery dispensaries. The survey showed that out of 15,480 persons examined during the first 6 months of the year, about 1,000 persons were suffering from

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Fig. 1. Contact dermatitis from slurry explosive.



Fig. 2. Explosion in coal mines.

dermatological lesions, which is the third major health hazard in the coal mining areas.

Some interesting cases of occupational

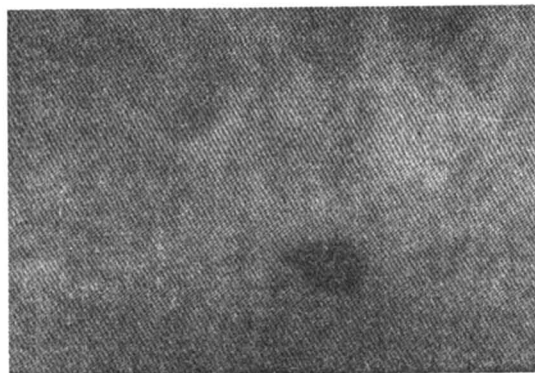


Fig. 3. Contact vitiligo from miner's helmet.



Fig. 4. Contact vitiligo from miner's helmet.

dermatitis were recorded like coal dermatitis in 2 cases, contact dermatitis due to slurry explosives, oil and grease among pump workers, cap lamp among cap lamp issue clerks, immersion foot syndrome among trammers, tandels. Mycetoma of the foot and parasitic infestations are common dermatological conditions encountered due to poor hot and humid unhygienic conditions in the mines.

Results

Results are shown in Table I.

Discussion

1. Mining is a major industry for growth of the nation.
2. The industry is still a labour intensive and about 150,000 workers are employed in

M/s Eastern Coalfields Ltd. and some about same in M/s BCCL.

3. A miner has to work 8 hours a day in the underground. Desperate attempts are made to keep them away from occupational health hazards. A miner suffers from respiratory tract diseases like pneumoconiosis due to inhalations of dust (below 10 microns diameter size) particles for a prolonged period (10-15 years).

But the survey shows that not only pneumoconiosis and GI tract disturbances like diarrhoea etc, are the common miners diseases but skin conditions also get a bronze medal in this competition.

Most interesting cases like coal dermatitis in 2 cases have been established by X-ray diffraction from a driller in a mine where the

Table I.

Month	Med Exam done	Respiratory Tract disease	Gastroenteritis	Skin disease (infestation)	Various skin disease due to contact	Disease of the eye	Other disease
Jan	1309	333	325	75	02	25	425
Feb	1250	345	307	66	03	22	455
Mar	1246	345	350	78	04	25	540
Apr	1350	356	360	85	04	28	539
May	1138	416	412	98	06	28	538
Jun	1459	450	512	96	09	25	545

coal particles got stuck in the scrotal skin causing granulomatous changes which is not very uncommon. They rarely use athletic supporter while drilling.

Interesting cases of contact dermatitis are also discovered due to contact of explosives like Permadyne, Soligex, Slurry explosive. The explosive carrier has to carry in a plastic bag these explosives to the site of blasting and he has to fill up these holes manually before it is detonated from a distance. Due to repeated contact it is quite common that they get eczematous condition of fingers and hands.

Contact with petrochemicals like greases, mobile oil, diesels by pump khalasis

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and dozer and shovel operators and maintenance workers are common things.

It is unfortunate that none of the colliery hospitals in this area is provided with Specialist (Dermatology).

There are 22 hospitals in ECL and BCCL areas including 2 Central Hospitals.

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