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Title: Prevalence of graphite related lung diseases amongst graphite miners

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Body: Background Bogala is one of the largest graphite mines in Sri Lanka where graphite pneumoconiosis(GP) was first described¹. Strict dust control measures and protective legislation had been introduced since 1972. Objectives To evaluate graphite related lung diseases amongst the miner population at the Bogala graphite mine. Method All miners were screened for symptoms of respiratory disease with a questionnaire followed by physical examination, chest radiography, sputum AFB and spirometry. Results There were 183 workers. Out of which 171(93.4%) were males. There were 66 (36%) underground workers and 117 (64%) surface workers. 20.5% males were smokers The majority (33.3%) had worked for a period of 10-14 years. 15.2% had worked for fewer than 5 years, 27.5% for 5-9 years and 10.5% for 15-19 years. 13.5% had worked for more than 20 years. Majority was asymptomatic. 2 had non-specific cough, 1 had dyspnea, and 1 had both. All 4 had normal spirometry and chest radiography. Examination was normal in all. None had chest radiographic evidence of GP. Radiological abnormalities were noted in 4.3%; emphysematous changes in 2, hilar prominence in 2, apical pleural thickening in 1, nonspecific inflammatory shadows in 3, and left lower zone bronchiectasis in 1. Sputum AFB was negative in all. Spirometry was normal in the majority. Restrictive pattern on spirometry was seen in 9% (n=17). However all were asymptomatic with normal chest radiography. Conclusion GP and related diseases have become a rarity in the exposed probably related to the introduction of protective equipment and safer environment. 1. Ranasinha, K. W. et al Brit. J. industr. Med.1972;29:178-183. Graphite pneumoconiosis.