any theophylline-erythromycin interaction remains questionable, particularly in view of the already wide interpatient variability intrinsically associated with theophylline pharmacokinetics.[6,7] If such an interaction really exists, it appears to be minimal when compared to other recently characterized drug-drug interactions (*eg*, digoxin-quinidine).[8] Until an effect of erythromycin on theophylline pharmacokinetics is more rigorously established, empiric recommendations for dosage adjustment in patients receiving concomitant erythromycin may be premature.

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Beryllium Disease

Necessity for Continuing Surveillance

To the Editor:

Three cases of chronic beryllium disease diagnosed between 1978 and 1980 were recently reported to the Beryllium Case Registry (BCR) of the National Institute for Occupational Safety and Health (NIOSH). All three were machinists who fabricated beryllium metal parts for missile guidance systems in a large aerospace manufacturing plant in California. A review of environmental survey data suggests that levels of exposure to beryllium dust exceeded prevailing occupational exposure standards during the 1960s and early 70s, and were likely responsible for the subsequent development of the disease.

Acute beryllium disease was first reported in the European literature in 1933.[1] In the United States, hundreds of cases of acute and chronic beryllium disease were documented during the 1940s and 50s.[2] After recognition of the serious health hazard associated with beryllium, control of exposure led to a reduced number of both acute and chronic cases.[3] During the period of 1973 through 1977, 55 cases were added to the Registry, for an average of 11 per year.[4] During the five years which followed (through 1982), only ten cases were added, making the current number 897.

Beryllium phosphor was once used in fluorescent lighting tubes. Although this major use was discontinued in 1949, beryllium's many industrial uses and the resultant opportunities for toxic exposure still exist. Major consumption occurs in the nuclear and aerospace industries, in electrical applications, and in the manufacture of many electronic devices.

Recently, Balmes et al[5] reported four cases of chronic beryllium disease among workers in a secondary smelter in Connecticut where scraps of beryllium-copper alloys were melted to reclaim copper. The four cases were documented over a period of eight years, and all resembled sarcoidosis. Exposure to beryllium oxide in the melting process was probable.

The similarities between sarcoidosis and beryllium disease have been well established.[6] Differential diagnosis of sarcoidosis requires the consideration of beryllium disease and a careful review of occupational history. *In vitro* lymphoblast transformation test[7] and T-lymphocyte count from bronchoalveolar lavage[8] have been advocated as useful aids for the differential diagnosis. Chemical assays for beryllium in lung tissue, lymph node and urine are useful in evaluation of the individual's exposure.

While the number of beryllium disease cases appears to be waning, its potential still exists in certain industries, as amply illustrated by these clusters. Physicians can play a role in the continued control of beryllium disease by reporting any suspect cases to the U.S. Beryllium Case Registry. Inquiries and reports should be addressed to:

Beryllium Case Registry
The National Institute for Occupational Safety and Health (NIOSH)
Robert A. Taft Laboratory
4676 Columbia Parkway
Cincinnati, Ohio 45226
Attn: Surveillance Branch, F-2
Phone: 513/684-3284

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