

Vinyl Chloride Concern Called Unneeded for Present Workers

Internal Medicine News Service

Concern that exposure to vinyl chloride, the monomer of the plastic polyvinyl chloride, may cause liver cancer or other occupational disorders may be unnecessary for present workers, according to a physician and a toxicologist who have been seeing workers from polyvinyl chloride plants for several years.

Greater concern for workers' health and safety and improved controls on exposure levels in the plants may have eliminated the danger before the connection between vinyl chloride and angiosarcoma was discovered, Dr. John L. Creech Jr., of Louisville, and V. K. Rowe, Sc.D., of the Dow Chemical Company, Midland, Mich., agreed in separate interviews with INTERNAL MEDICINE NEWS.

Fifteen workers have been reported with angiosarcoma, an exceedingly rare cancer that is always fatal. A more common condition associated with vinyl chloride exposure is acro-osteolysis, a skin disease characterized by blanching or pain in the fingers (Raynaud's syndrome); thickened, nodular patches of skin on the hands; and the disintegration of the distal bones of the fingers.

Sees Little Hazard

Dr. Rowe told this newspaper that he feels that under present conditions, workers in vinyl chloride plants do not face a very great hazard of either angiosarcoma

or skin disease because exposure levels in most plants making polyvinyl chloride are now much lower than they were previously.

There have been no significant vinyl chloride-related health problems at the Dow plants, where operations have been maintained at relatively low levels of exposure.

Dr. Creech, who has seen many of the reported cases of angiosarcoma and was the first to recognize the association of the liver tumors with vinyl chloride workers, agreed that there is probably little danger for present workers.

Both the acro-osteolysis and the angiosarcomas were found mainly in those workers who cleaned out the reaction kettles, where the levels of vinyl chloride were in the range of hundreds of thousands of parts per million. Workers in the same job may now face no exposure whatsoever because they work with a self-contained respiratory system that eliminates all atmospheric particles of vinyl chloride, he said.

None of the patients with angiosarcomas had skin diseases that could be related to their vinyl chloride exposure. Of eight cases of acro-osteolysis observed by Dr. Creech, no patients had any detectable liver abnormalities.

Because of the observed carcinogenic activity of vinyl chloride and the associa-

tion between the plastic and various skin disorders, it seemed likely that an increased incidence of skin tumors might be found in exposed workers. However, no such increase was found, and there were no skin tumors in any of the patients with angiosarcomas, liver changes, or splenomegaly that could be attributed to vinyl chloride, Dr. Creech said.

Despite the report of one person who developed angiosarcoma after living downwind from a polyvinyl chloride plant, there is probably no danger to people living around such plants, he said.

Since even workers within the plants who worked within 10 feet of the reaction kettles have not developed the cancer, it seems that the small amounts of vinyl chloride that might escape to the outside would have little effect. The one reported case was probably a chance occurrence, Dr. Creech suggested.

There is also evidence that angiosarcomas produced by vinyl chloride and other angiosarcomas are two different entities. Cases that have been reported that are not related to vinyl chloride often have distant metastases of the tumor, most frequently to the lungs.

None of the patients with angiosarcoma linked to vinyl chloride have distant metastases, although some have had spread of the cancer to the lungs by direct extension, invading through the diaphragm, he said.

While this may be small comfort to patients who now face a certain death from the disease, the absence of metastases has proven to indicate a good prognosis in other types of cancer.

UNDERDEVELOPED NATIONS AGREE ON PLAN TO GAIN ECONOMIC STATUS

ALGIERS (UPI) -- MORE THAN 100 THIRD WORLD NATIONS HAVE COME UP WITH A PROGRAM TO "TRANSFORM THE WORLD ECONOMY" -- AND TO GIVE THEMSELVES A BIGGER SHARE IN IT.

THE PROGRAM, ALREADY AGREED ON IN COMMITTEES, WAS TO RECEIVE FORMAL ENDORSEMENT TODAY BY 104 NONALIGNED NATIONS.

THE PROGRAM RELIED HEAVILY ON THE MONEY AND GOOD WILL OF THE WEALTHY WESTERN NATIONS. WESTERN AGREEMENT WILL BE SOUGHT WHEN THE PROGRAM GOES BEFORE THE U.N. INDUSTRIAL DEVELOPMENT ORGANIZATION CONFERENCE IN PERU MARCH 12-26.

THE PROGRAM SEEKS TO INCREASE THE DEVELOPING NATIONS' SHARE OF WORLD INDUSTRIAL OUTPUT FROM SEVEN TO 25 PER CENT BY THE END OF THE CENTURY.

ONE SECTION OF THE PROGRAM DEALT WITH WHAT THE DEVELOPING NATIONS COULD DO FOR THEMSELVES. THE OTHER SECTION FOCUSED ON WHAT REQUIRED HELP FROM THE WEST WAS NEEDED.

AMONG THEMSELVES, THE NATIONS ENDORSED THE NEED FOR CARTELS AMONG PRODUCERS OF RAW MATERIALS, FOR REGIONAL ECONOMIC BLOCS AND FOR FINANCIAL AID FROM OIL-RICH DEVELOPING NATIONS TO POORER COUNTRIES.

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