medical sciences

OPTOMETRY

Help for distorted vision

An isogonal—equal angle—spectacle lens developed at the University of New South Wales in Australia appears to help persons with distortion of vision.

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Prof. J. R. Lederer, head of the university's optometry department, says some 60,000 Australians experience slanting and incorrect registration of distances when wearing spectacles. Many of them have an unequal vision power in each eye, which an ordinary spectacle lens may not correct.

After six years of tests, optometrists report a high degree of success with the isogonal lenses.

CANCER

Melanomas not always malignant

Black tumors on the skin have traditionally been viewed with alarm by physicians, but malignant melanomas are comparatively uncommon.

Dr. Ervin Epstein of the University of California Medical Center in San Francisco reports in the May 26 JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION that only 2.1 percent of 559 of his patients with black lesions on the skin had malignant melanomas.

Certainty of diagnosis depends on a biopsy, but there is a widespread belief that cutting into a melanoma causes it to disseminate throughout the body, so most doctors have avoided doing biopsies and have performed mutilating operations around the growth, leaving scars that are disfiguring for life.

Dr. Epstein reports that the belief is not true, and recommends biopsy first, then treatment. Dr. Epstein enlisted the assistance of the California Tumor Registry of the State Department of Health.

From a study of melanoma cases from 1950 to 1954, Dr. Epstein found that in cases where a biopsy or simple cutting procedure had been performed before surgery to remove the melanoma, the survival rate was no worse than in patients who had not had the biopsy. In a large number of instances the lapse between biopsy and surgery was at least seven days.

RESPIRATORY DISEASES

Alloy grindings injure workers

Workers exposed to dust of copper alloys used in the manufacture of metallic linings, filters and electrical contacts may suffer from inflammation of the mucous membranes of the upper respiratory passages, sometimes accompanied by nosebleed and excessive drying of the nasal passages.

After testing with experimental animals, Soviet researcher I. T. Brahnova reports that the alloy dusts cause inflammatory changes in lung tissue, degeneration of liver fat and proteins, changes in the covering of kidney tubules and vessel walls and result in defective capillaries.

On the basis of observations in industry and animal experiments, Brahnova recommends a maximum permissible concentration of 0.5 milligrams per cubic meter in the air.

SAFETY

Motorcycle controls needed

The motorcycle is the most deadly vehicle operating on the public highway, says John J. O'Mara of the University of Iowa Safety Research Center.

The solution is drastic redesigning, he told a traffic medicine congress in New York City. Government agencies should specify requirements such as the number of wheels to insure stability, and the arrangement and configuration of the wheels. A protective envelope or body should be required, and restraining and anti-ejection devices should be provided, he says.

More than 2,000 motorcycle riders a year are killed in accidents, and with sales increasing, more deaths are to be expected. The chance of a cyclist being killed is 20 times that of a car driver, and a passenger is more likely to be killed than the driver, according to studies in Great Britain, O'Mara says.

The severity of injuries resulting from motorcycle accidents is greater than for any other form of traffic accident, and the victims are mainly young men and women between the ages of 15 and 25.

DERMATITIS

Herb causes blisters

Sixteen women at a Czech agricultural establishment employed in hand-picking the herb garden rue got a skin disease with blisters because the rue was still wet and exposed to the sun.

Skin tests with dried rue stems and leaves, or with extracts of the plant, prepared with water, ethyl ether and petroleum ether, proved negative, both with the affected persons and control subjects without blisters. Even under ultraviolet radiation there was no positive reaction.

The Czech researchers, L. Hanslian and K. Kadlec, believe that the exposure of wet plants to the sun results in the emission of an oily substance called bergaptene which causes the problem.

RESPIRATORY DISEASES

Pigeons cause trouble

A 15-year-old admitted to Massachusetts General Hospital with shortness of breath and a history of weight loss and persistent cough contracted his disease from pigeon dust, a Harvard Medical School group reports.

The boy had raised pigeons for seven years; none of the birds had been ill; he had no history of allergies. He was given antibiotic tetracycline for two weeks without improvement. His X-rays were normal; tuberculosis and other disease tests were negative.

He was finally discharged with the firm recommendation to avoid further contact with pigeons. Pigeons and coop were removed and his symptoms gradually cleared. Two years later, tests showed him normal.

Reporting the findings in the May AMERICAN JOURNAL OF DISEASES OF CHILDREN were Drs. Daniel Shannon, Joseph L. Andrews, Sixto Recavarren and Homayoun Kazemi.

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