which are clearly futile and will only prolong the act of dying."

As for the basis of decision-making in complex cases, the groups said, "in cases where it is uncertain whether medical treatment will be beneficial, a person's disability must not be the basis for a decision to withhold treatment.

"... [C]onsiderations such as anticipated or actual limited potential of an individual ... must not determine the decisions concerning medical care," but "the individual's medical condition should be the sole focus of the decision." This would appear to preclude considerations about the quality of life.

The pediatrics academy, which has been the chief voice for the medical groups, claims that this section does not indicate any change in its position, despite the fact that the AAP supports in principle the decision of Baby Jane Doe's doctors to refrain from surgery. Because the infant was not in the process of dying at the time of the decision, it would seem that the decision was made on the basis of her very severe limitations as well as her poor prognosis.

Denver pediatrician James Strain, past president of the AAP, puts a rather free construction on the principles. He says that the section about "limited potential" was designed with Down's syndrome babies in mind and that surgery for a Baby Jane Doe, who has "no cortical function at all as I understand it" would be a matter of "individual consideration."

Strain also contends that surgery could be regarded as "clearly futile" if it does no more than prolong "an inevitable situation." In other words, he says, any measure that did not give the infant a chance at a normal life-span could be one that "will only prolong the act of dying."

The real message of the principles, says Strain, is that local review committees are needed so that every case can be considered on an individual basis

Handicapped groups, according to Paul Marchand of the retarded citizens association, interpret the principles rather more broadly. Marchand says that if everyone abided by them, a lot more handicapped babies would be getting treatment, and that there is no question that Baby Jane Doe would be getting surgery. He says that

the clause stipulating that an infant's disability not be a basis for withholding treatment also applies in her case, because it means that doctors would not forgo attempts to correct one defect on the grounds that there are others

So, there remains much to be resolved. Perhaps the most important aspect of the statement, aside from its existence, is its emphasis on the need for society to provide continuing support for such individuals once a decision is made to keep them alive. The Administration, while righteously declaiming about the value of all human life, has made radical cutbacks in relevant support programs.

-CONSTANCE HOLDEN

## EPA Tightens Pesticide, Toxic Chemical Testing

Spurred in part by discovery of mismanagement in certain contractor-run chemical testing programs, the Environmental Protection Agency (EPA) last month published regulations to tighten up the testing of pesticide and toxic substances. The new standards, which will take effect next spring, have been in the works since 1980.

The standards spell out EPA's authority to monitor industrial and other outside testing programs that submit data to the agency. For example, they outline the agency's authority to inspect facilities and reject studies, and specify how long an organization must retain raw data for possible auditing. The rules also make clear that contractors or consultants must be notified of the standards and that the sponsor of a study assumes the responsibility for ensuring compliance with them.

EPA's new good laboratory practice standards are modeled closely after Food and Drug Administration standards. They also were written to correspond with guidelines laid down by the Organization for Economic Cooperation and Development, the main difference being the international group's guidelines carry no power of enforcement. This near-uniformity among the several sets of standards is intended to assure that data developed in one country will by accepted internationally.—Jeffrey L. Fox

## Yellow Rain on Darwin's White Roses

Braydon Guild, an immunologist at Harvard University and collector of Darwiniana, recently came across what he thinks may be the earliest recorded yellow rain incident. It occurred in Charles Darwin's garden after a summer shower at about 10 a.m. one July morning in 1863. Though no military activity was noted, this is what Darwin observed, according to a letter sent to the *Gardeners' Chronicle and Agricultural Gazette*:

My wife gathering some flowers immediately afterwards noticed that the drops of water appeared yellowish, and that the white roses were all spotted and stained. . . . I then looked at several roses and syringas and found them much stained in spots. Between the petals of the double white roses there were still drops of the dirty water: and this when put under the microscope showed numerous brown spherical bodies, 1/1000 of an inch in diameter, and covered with short, conical transparent spines. There were other smaller, smooth, colourless sacs about 4/ 7000 of an inch in diameter. . . . The petals, now that they are nearly dry, seem stained with absolutely impalpable matter of the colour of the rust of iron.

The Gazette author who reported this event in 1863 wrote, "We have not been able to ascertain precisely to what plant the larger bodies belong, but we believe them to be the pollen grains of some thistle or centaurea." Others observed that fir pollen and fungi spores could be carried by the wind and deposited by rain on leaves.

Guild was inspired to cite Darwin's encounter with yellow rain after reading in Nature that Chinese scientists concluded 6 years ago that yellow rain is probably bee excrement. The Chinese study, published in Kexue Tongbao in September 1977, said that an investigation was made to identify the source of yellow rain falling in the countryside. The analysis of 500 yellow, sticky spots revealed them to be primarily pollen, containing the same types of grains (also in the same relative quantities) found in bee excrement. British intelligence knew of this finding, according to Nature, but did not comment on it publicly.

These various reports make it seem more plausible that yellow rain could come from natural sources.

-ELIOT MARSHALL