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BIOMEDICINE

High blood pressure deaths lowered

High blood pressure and its often fatal consequences can be reduced with an aggressive, systematic treatment system that includes treating persons with "borderline" high blood pressure. These findings, which settle several controversial questions about high blood pressure treatment, come from a recently completed nationwide study sponsored by the National Heart, Lung and Blood Institute in Bethesda, Md.

The study was designed to answer two questions. First, which is more effective in reducing mortality from high blood pressure—a systematic clinic-based program, or treatment by a personal physician? And second, do the benefits of therapy outweigh the possible toxic effects, even among persons with mild high blood pressure?

To find the answers, researchers looked at the effects of two treatment programs — one systematic "stepped care" (SC) and the other "referred care" (RC) or individual treatment. The 10,900 participants were assigned at random to one of the groups. After diagnosis, the RC patients were sent to their doctor for treatment. The SC group, however, took part in a free standardized program of anti-hypertensive therapy. The SC focused on drug therapy, although participants were counseled about other ways of lowering blood pressure — diet, weight loss, stopping smoking, etc. The SC program emphasized particularly the importance of following treatment faithfully once it was prescribed.

Stepped care, it seems, did pay off. Over five years, the mortality rate for the SC group was 17 percent lower than for the RC group. And among borderline hypertensive persons, mortality was 20 percent lower in the SC group—clear evidence that it is worthwhile to treat mild high blood pressure.

NHLBI Director Robert Levy emphasized that "this was not a case of comparing good care with no care. It was a comparison of aggressive care versus the typical care one would find in our communities." It shows, he said, that "people with high blood pressure who undergo systematic care will live considerably longer than those who receive no care or routine care."

Sex during pregnancy may be unsafe

Sexual intercourse during pregnancy — particularly the month before delivery — may lead to an increase in infections of the amniotic fluid in the mother, which may in turn lead to greater numbers of fetal and neonatal deaths. Infections in the fluid that surrounds the fetus are the most frequent underlying cause of fetal and neonatal deaths in the United States.

These findings — which come from a study by Richard L. Naeye of Hershey Medical Center in Hershey, Pa. — are based on data from nearly 27,000 pregnancies. According to this analysis, Naeye says, "Mothers who reported coitus once or more per week during the month before delivery had more frequent amniotic-fluid infections before 33 weeks of pregnancy than did those who reported no coitus." The effects that Naeye found to be associated with intercourse during pregnancy were greater in premature than in full term infants.

In addition to higher rates of infection, Naeye found that premature infants whose mothers reported having intercourse in the months before delivery had other problems. Twice as many of these infants had trouble breathing, and had low "Apgar" scores, which rate an infant's physical condition one minute after birth.

The reasons for the increase in problems are not yet known, Naeye says, but he suggests that "it is possible that a greater number or variety of bacteria reach the amniotic fluid after coitus." The study appeared in the Nov. 29 New England Journal of Medicine

408 SCIENCE NEWS, VOL. 116