REFERENCE


REPLY

Sir,

In formulating my response to Dr. Gonover and to Dr. Turpin regarding the potential bleeding diathesis they were concerned about with regard to vitamin E therapy, I have consulted with various experts around the world regarding this as well as any other potential hazard that I may have missed in my research on the safety and efficacy of vitamin E prior to beginning my initial study.

I have been in communication with Dr. Salkeld, who is the renowned expert in the field of vitamin E research and therapy. He was also provoked by the article in the J.A.M.A. 246: 129, 1981 by H. J. Roberts entitled Perspective on Vitamin E as Therapy, in which he cites a wide range of side effects and laboratory abnormalities attributed to vitamin E therapy. He feels as I do, that the effects of vitamin E should be viewed in the light of the thousands of published cases with good tolerance. He carried out a yet unpublished survey of the literature in 1975 and found 9,000 cases in which doses of up to 3000 IU daily were administered for up to 11 years (and 55,000 IU daily for 5 months for a few subjects) with no side effects being reported in any of these cases. A response to the J.A.M.A. article was published in which many of the dangers were challenged, especially its cause of thrombophlebitis as well as its reported beneficial effect on chronic hemolytic in Mediterranean-type glucose-7-phosphate dehydrogenase deficiency.

More specifically, the possible danger of bleeding diathesis as a direct result of vitamin E therapy may well be valid for the group of patients and test animals that these articles are written in reference to, such as its effect on prothrombin levels in warfarin-induced vitamin K deficiency in rats or the very select group of human patients severely deficient in vitamin K with severe liver disease, but it would have little or no clinical significance in the patient population who are seeking breast augmentation. I could imagine that just giving a rat a glass of water who has ingested a large amount of warfarin could cause him to bleed. The other vitamin K-deficient states, such as biliary tract obstruction, malabsorption syndrome, such as sprue and celiac disease, and severe liver disease, would not be a group of patients whom we would be seeking to perform elective cosmetic surgery upon, and if they had had their surgery prior to contracting these diseases, their severe illnesses and debilitated state would leave them little desire to be ingesting vitamin E capsules daily. It would also have to be assumed that they were under a competent medical doctor’s care and that he or she would be regulating all drug and vitamin therapy at that time.

As my hematologic consultant, Dr. Craig Kitchens, of the University of Florida, responded: “Any effects of vitamin E on blood at this time are at the fringes of science, and whatever they are, they are probably weak. Dr. Turpin’s points are rather invalid concerning the population about which Dr. Baker writes in regard to vitamin E therapy for control or prevention of capsular contracture because it is extremely unlikely that any of these patients would have any of the medical illnesses cited. Therefore, I feel it would simply suffice for me to state that it is unlikely that vitamin E is of any consequence on blood clotting, and refuting those dangers cited in Dr. Turpin’s letter, its safety and efficacy can be brought into reality by stating that not all patients in the world but only those who are likely to undergo elective cosmetic breast surgery would be taking this vitamin E therapy in these doses.” In the large series that we have followed closely over these past years, all our patients have been taking between 2000 and 1000 IU daily. The only side effect thus noted is occasional exacerbations of complexion problems in patients who had previously had acerous skin in their teen years. This is apparently due to increased stimulation of the oil glands or possible excretion of some of the excess oil through the skin. Since we start our patients on the vitamin E at least 1 week before their surgery, I feel that if bleeding diathesis could develop from the increased vitamin E levels, it would have been noted during surgery.

Each physician must prescribe for his patients with his own conscience. Those physicians who have reservations or fears should not add this regime to their armamentarium in trying to diminish breast contracture problems. The propriety of the literature supports my observations that no adverse or irreversible problems have been noted in patients taking high doses of synthetic vitamin E and that vitamin E therapy has potentially beneficial effects. Statistically, a certain number of patients will die undergoing elective aesthetic surgery, despite the surgeon’s diligence in ensuring that his or her patient is well prepared to safely undergo the surgery, yet we do not stop operating on patients to improve their appearance. We all must make decisions daily regarding the well-being of our patients, and whether or not to recommend vitamin E to our patients in the hopes of preventing severe capsular contracture, which could result in yet another elective operative procedure with its inherent risks, must be determined by each individual surgeon.

James L. Baker, Jr., M.D.
400 West Morse Blvd.
P.O. Box 1179
Winter Park, Fla. 32790

REFERENCES

3. Kitchens, C., Associate Professor of Medicine, University of Florida. Personal communication, 1982.

PRIMARY AND SECONDARY NERVE REPAIR

Sir,

I write in regard to the article A Comparative Study on Primary and Secondary Nerve Repair, by Eiji Hatano (Plast. Reconstr. Surg. 63: 700, 1981). The author makes his mistake before the experiment began: that was to choose the rat for an experimental animal in studying peripheral nerve repair, when he implies the results can apply to humans. Kline et al. have shown that the higher the animal on the phylogenetic scale, the more valid are the results of studies of peripheral nerve repair, if we expect to gather knowledge to apply to humans. In the investigation by Kline’s group, they
compared peripheral nerve repairs in chimpanzees, baboons, rhesus monkeys, and dogs. They found that only the higher primates had the connective-tissue proliferation, axonal disorganization, and less remyelination of the repair site and distal nerve segment as is found in humans.

On a lesser note, I would comment that Dr. Hatano, in his discussion, does little to separate the repair of nerve injuries caused by crushing trauma, such as in war time, as opposed to the sharper trauma in civilian life. There is strong evidence to show that gunshot wounds, high-speed missile wounds, and any trauma that stereotypes a nerve causes severe nerve injuries both at the site of wounding and at a distance of several centimeters proximally and distally from this point and are best repaired secondarily. This type of trauma causes not only gross destruction of nerve, but also of other tissues, which leads to scarring and a poor bed for the repaired nerve. These injuries, which occur most commonly in war time, but are increasingly frequent in civilian life, tend to occur in the upper arm and forearm and are best repaired secondarily. In contrast, the sharp knife and glass nerve injuries tend to occur in the wrist and hand and involve the nerve only at the site of injury, extending a few millimeters proximally and distally. These sharply divided nerves are best repaired primarily.

The confusion generated by articles such as Dr. Hatano’s adds fuel to the fact that “the optimal time for nerve repair continues to be controversial.”

William C. Grabb, M.D.
Section of Plastic Surgery
C. 7290 University of Michigan Hospitals
Ann Arbor, Mich. 48109
(Now deceased.)

REFERENCES


REPLY

Sir:

In any experiment where the results are to be applied to humans, it is obviously better to select higher primates as the experimental animal. In my previous experimental study on denervated changes in muscle fibers and motor end plates, rats were used and the findings obtained have been published. It was found in this previous experiment how difficult it was to maintain muscles in a denervated condition. Even in rat nerves, whose reinnervation is extremely active, it has been observed that the degree of muscle recovery is better by primary nerve repair than by secondary nerve repair, suggesting that the same can be said of human nerves, whose reinnervation ability is weaker than that of rats.

My experiment is a comparison of primary and secondary nerve repair of sharply cut nerves and not an experimental study of suture of crushed nerves. However, it is considered that even with crushed nerves, if the damaged portion of the nerve stump is resected until the intact portion is well exposed and then the neurorrhaphy is done, the results of primary neurorrhaphy would be better than secondary neurorrhaphy. If, however, by resecting the damaged portion of the nerve, a nerve defect is formed between the proximal stump and distal stump and thus nerve tension develops by neurorrhaphy, it is recommended that a nerve graft be made. Dr. Hiramatsu of my department, in his experimental study using rats, has demonstrated that better results can be obtained by making the nerve graft at an early stage.

Koji Hatano, M.D.
Department of Orthopedic Surgery
Hiroshima University School of Medicine
Kasumigaoka 1-2-3, Minami-ku
Hiroshima, Japan 734

REFERENCES


SKIN GRAFTS IN MICROVASCULAR SURGERY

Sir:

I was surprised to see the paper entitled Split-Thickness Skin Grafts in Microvascular Surgery, by McDonald, Buncke, and Goodstein (Plast. Reconsr. Surg. 68: 731, 1981) without their making reference to a similar publication.

In my experience, I have found that the proximal coverage of large vessels is better done by flaps, but the distal coverage is better done by skin grafts.

Vladimir Mitz, M.D.
Hôpital Broussais
78, rue de la Convention
75730 Paris
Cedex 15
France

REFERENCE


REPLY

Sir:

We would like to apologize to Dr. Mitz and his colleagues for not having cited their work in our article. The reason that the article was not picked up was the close proximity in time of the publication of their article in Paris (September 1980) and the submission of our article (September 17,