accordingly. This would be a major step toward helping reduce some of those very valid concerns expressed in Dr. Ungerleider's letter and showing physicians in general that the "Ten Medical Myths About FDA"[1] really are only myths.

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REFERENCE

1. Kennedy D: Ten medical myths about FDA. West J Med 127: 529-534, Dec 1977

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TO THE EDITOR: It is difficult not to be saddened by Federal Drug Administration (FDA) Commissioner Kennedy's comments (Correspondence, March issue) regarding Dr. Arnold Mandell, especially at a time when his authoritative voice is so badly needed. In his reply to Dr. Ungerleider's letter "FDA—The 11th Myth" (Correspondence, February issue), Dr. Kennedy states: "As to the bizarre events surrounding Dr. Arnold Mandell's brief involvement with the National Football League, they are obviously beyond the point here—which is perhaps fortunate, since they are also beyond my comprehension." Kennedy quotes his earlier statement (Ten medical myths about FDA, West J Med 127:529-534, Dec. 1977) that " 'the important consideration is whether departure from approved indications is documented by a *legitimate scientific rationale* for such use' (italics added)." He adds "That determination is in the hands of 50 legal jurisdictions, and out of FDA's."

It may be technically correct that FDA has no control over the interpretations placed upon its regulations by the several state boards and agencies. But what the commissioner says about these regulations is very important. The phrase "legitimate scientific rationale" is one that requires some explication. In the case of Dr. Mandell, for example, what would the commissioner accept as "scientific"? Is it scientific to extrapolate from the accumulated experience of physicians who work in the field of drug dependence? Such physicians recognize that one may at times prescribe the very drugs upon which the patient has become dependent, while simultaneously engaging him in a contract to work toward elimination of the dependency. Is this scientific? Is it "legitimately" (if such a distinction is necessary) scientific? One senses, from what Dr. Kennedy does not say, that he views Dr. Mandell's prescribing practices in regard to the San Diego Chargers as failing to meet one (and thus both) of these criteria. If so, it would be helpful for him to say so, making it possible to debate the issues more openly. His comment that the events surrounding the Mandell case are beyond his comprehension is unfortunate, since these events raise issues of vital concern to all physicians. Primary among them is the validity of clinical judgment, *endorsed by fellow professionals who specialize in the same field,* as a guide to therapy. If such judgment does not constitute a "legitimate scientific rationale" then a crisis is in store for American medicine.

The Mandell case also speaks to another issue, not commented upon by Dr. Kennedy: the need to do something about amphetamine self-medication in professional sports. If the FDA is truly concerned about the adverse consequences of improper drug use, it will gird up its loins and take on this long-standing, shamefully neglected, problem. Even if it has no jurisdiction in this area, an official FDA statement confirming the existence of the problem and urging the football establishment to "clean up its act" would be a courageous and effective beginning. Admittedly there are serious political risks in tampering with an industry whose gate receipts and TV sponsorships might be badly hurt by such an intrusion, but Commissioner Kennedy could at least be assured that in this battle he would undoubtedly have the overwhelming support of the medical profession.

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Gerontology and Geriatrics

TO THE EDITOR: In reference to your editorial "Thoughts About Geriatrics" and Alex Comfort's article "Geriatrics—The Missing Discipline?", both contained in the March 1978 issue—A resounding and exuberant bravo.

While the field of gerontology continues to mature at a very rapid pace and impetus has increased in recent times about the issues of human aging and the specialized medical needs of aging and aged persons; data, action and follow-up remain for the most part negligible. There are few gerontologists, researchers and even fewer medical schools and medical practitioners engaged in the training and delivery of medical care to the nation's growing aged population. Historically, the few who have engaged in such research, training and medicine confine their efforts to pharmacological research and inter-

mittent, sometimes questionable medical care in nursing homes, homes for the aged and other like facilities. It has only been recently, as Comfort points out, and largely because of the influx of great numbers of geriatric patients, that the Veterans Administration has gotten involved in geriatric training and geriatric medicine. Here too, however, only a few pockets of such programs exist. Nationwide involvement is bogged down in the quagmire of government bureaucracy. Optimist that I am, however, "a bird in the hand, is worth two in the bush."

A prime reason for our relative lack of medical and scientific concern may well be the dearth of researchers, insightful medical school administrators and medical school students who are trained, want to be trained or even interested, for that matter, in the scientific study of all aspects—medical, clinical and biological—of geriatrics and gerontology. Certainly, we know the financial incentive is just not there.

The American Medical Association and medical schools across this country have a gleaming opportunity in the very palms of their hands—use it! Use that powerful lobby to bring forth needed funds for the development and implementation of geriatric medicine and gerontology training in our medical schools.

It is my deepest hope that the AMA, medical schools and continuing education programs for those in practice utilize the highly trained and skilled gerontologists in the development and implementation of programs dealing with geriatric medicine. Finally, in the allocation of research funds and grants priority should be given to those schools and programs that have geriatric health care and geriatric medicine, developed by qualified gerontologists, included in their curriculum and research projects.

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Thoracic Outlet Syndrome

TO THE EDITOR: The article "Thoracic Outlet Syndrome" by Ward W. Woods, MD in the January 1978 issue deserves several comments.

First, I agree, and it is generally recognized, that thoracic outlet syndrome (TOS) may follow a cervical soft tissue injury.

Second, the mechanism involves the initial injury to the anterior cervical muscles with attendant edema and spasm and then shortening and fibrosis of those muscles. The brachial plexus and subclavian vessels are irritated and compressed in the interscalene triangle and costoclavicular space. Prolonged immobilization, that is, greater than 2 to 3 weeks in a cervical collar, in a mild to moderate cervical soft tissue injury is a major contributing factor to the development of TOS. Early treatment includes appropriate use of a cervical collar, physical modalities, muscle strengthening exercises, gentle range of motion exercises, relief of myofascial trigger zones[1] and the use of a unique pillow that provides not only proper head, neck and shoulder girdle alignment but also gentle stretch (when desired) of the anterior cervical muscles.[2] These measures should prevent the syndrome from developing except in a very small percentage of patients. Therefore, a 23 percent incidence is somewhat tragic. Dr. Woods points out an average of a 14-month time lapse between the original injury and his first examination. Obviously, Dr. Woods is not involved in the early care of these patients and is not responsible for the apparent physical mismanagement of these soft tissue cervical injuries.

Third, Dr. Woods reaches the diagnosis of TOS on the basis of 20 signs and symptoms and acknowledges that some of the 20 are due to a vertebrobasilar artery syndrome. I was not aware that vertebrobasilar artery symptoms and signs could be considered to be part of the TOS and, therefore, Dr. Woods' apparently high incidence of 23 percent might be explained not only by early mismanagement but, also, by a unique expansion of the usual diagnostic criteria of TOS. Furthermore, some of the 20 signs and symptoms could be explained by myofascial trigger areas in the sternomastoid muscle[3] (postural dizziness and blurred vision), trapezius muscle[3] (retro-orbital pain), scaleni[4] (anterior and posterior chest pain). Discharges from trigger areas may also be accompanied by vasoconstriction and other autonomic effects in the reference zone of pain.

Fourth, Dr. Woods' preoperative treatment in the 459 TOS cases may have been too little and too late, especially if treatment of myofascial trigger zones and cervical joint mobilization techniques were not utilized.

The fifth and final point relates to Dr. Woods' operative procedure of transection of the anterior