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**Reply from the Authors:** Dr. Ruff describes two patients in whom orgasm was the primary manifestation of a focal seizure. These episodes, which are described as painful, were associated with tumors involving the right superior parasagittal postcentral gyrus. Painful seizures are uncommon;<sup>1</sup> when they do occur, an underlying neoplasm is frequently found.<sup>2,3</sup> While the cases described are in some respects different from our case, they clearly show that painful auras should alert the physician to the possibility of intracranial tumor.

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## Musical performance during anoxia

**To the Editor:** The fascinating article by Byer and Crowley<sup>1</sup> reminded me of another astonishing tale related by W. C. Halstead in his 1947 book *Brain and Intelligence*.<sup>2</sup> I have enclosed with this letter the relevant pages. [Text follows:]

The writer has examined several cases in which, following brain concussion, complex acts of behavior or even acts of high skill have been executed during an interval in which the individual did not "know" what he was doing. In one instance a nationally known professional baseball player played six innings of errorless ball after being "beaten" (struck on the head) by a pitched ball. He did not "come to" until nearly an hour after he had completed the game. In another instance a Catholic priest, with brain damage, played several holes of par golf with the writer during an interval of "total amnesia." A further illustration is provided from our studies of anoxia. A well-known concert violinist [Isaac Stern] was studied for altitude tolerance in our decompression chamber prior to a tour by airplane of military camps in the Southwest Pacific zone. As one part of the examinations, phonograph recordings and movies were made as he repeatedly performed from memory a particularly difficult passage of a Bach sonata under experimental conditions which, unknown to him, vari-

ously simulated sea-level and the altitude of several thousand feet. Under conditions of acute anoxia, he became euphoric, mildly confused and disoriented, and presented other signs to attendant clinicians of impaired consciousness. Yet in the judgment of his professional accompanist and of the writer, based upon repeated examination of the phonograph recordings, his technical rendition of a most complex pattern of fingering on the violin was flawless under all the experimental conditions. The observation that certain qualitative aspects were lacking in some performances does not alter the fact that the formal aspects of a highly differentiated skill persisted without a continuously associated high working level of consciousness.

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## Spontaneous cervical epidural hemorrhage, anterior cord syndrome, and familial vascular malformation

**To the Editor:** After the recent publication of our article,<sup>1</sup> a letter from Victor A. McKusick, M.D., of the Johns Hopkins Hospital prompted us to contact our patient again for a detailed description of the pedigree of his family. His father is of Irish descent, and his mother is half Irish and half American Indian. The maternal grandfather of our patient was Irish and his maternal grandmother was an American Indian. There is a family history of cutaneous hemangioma in three successive generations (figure). The familial distribution is compatible with autosomal dominant inheritance. The proband's mother had three hemangiomas removed, one each from the neck, back and right thigh respectively, and a fourth one on her face. One of his maternal aunts had a left ankle hemangioma removed at age 20 years. One of his sisters had a hemangioma resected from the right shoulder posteriorly when she was 15, and another one removed from her pelvis at the age of 31. The gene was apparently passed on to her two boys, the proband's nephews: they were found to have hemangiomas on the head; these were removed at the ages of 2 and 3, respec-