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Sydenham chorea.

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LETTERS

Sydenham Chorea

Kienzle et al reported MR findings in two cases of Syndeham chorea. Both cases showed increased signal intensity over the corpus striatum on T2-weighted images (1). Recently we had the opportunity to observe another case.

Two months after upper respiratory infection, a 16-year-old boy progressively developed generalized involuntary movement. There were choreiform movements of the extremities and facial grimacing. Three days after admission, the proximal interphalangeal joint of left index finger and the left wrist showed pain, swelling, and erythema. No skin lesion or subcutaneous nodules could be found. Antistreptolysin 0 titer was 300 (normal <200). Echocardiogram showed postinflammatory change of the mitral valve and subvalvular apparatus, which was consistent with rheumatic heart disease. Blood chemistry, complete blood count, copper, ceruloplasmin, erythrocyte sedimentation rate, thyroid function tests, C-reactive protein, rheumatoid factor, and antinuclear antibody were all normal. Penicillin treatment was begun 1 month after the attack and lasted for 10 days. All symptoms and signs subsided within 6 weeks. The clinical diagnosis was Sydenham chorea (2). MR on the 34th day after the attack was negative.

We consider the normal MR finding in the active stage of this illness may suggest that the choriform movement in Sydenham chorea also can be caused by local functional and/or biochemical change(s).

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References

1. Kienzle GD, Breger RK, Chun RWM, Zupanc ML, Sackett JF. Sydenham chorea: MR manifestations in two cases. *AJNR: Am J Neuroradiol* 1991;12:73–76
2. Stollerman GH. Rheumatic fever. In: Braunwald, ed. *Harrison's principles of internal medicine 1*. New York: McGraw-Hill, 1987:951–956

Reply

I agree that the case presented by Dr. Ju et al appears to meet the clinical criteria for a diagnosis of Sydenham chorea. Our experience in imaging of this disorder is limited to the two cases reported earlier. Of course, most neurologic disorders demonstrate a broad range of demonstrable pathology by imaging. Given the conspicuous and similar findings in our cases, however, I am slightly surprised by the report of a normal MR study in the active phase of this disease, and it is of value to know that a normal MR scan of the brain does not exclude the diagnosis of Syndenham chorea. The most common imaging appearance of this disorder remains to be determined.

Greg Kienzle
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More on Handgun Control

In a recent letter Dr. Lufkin suggests that the medical community should advocate handgun control (1). He argues, "What was, before the emergence of this strong scientific evidence, merely a controversial political and social debate has now become a clear-cut medical and public health imperative." This statement appears to be based on a single publication, which he cites extensively, that links a reduction of homicide and suicide in Washington, DC, to the implementation in 1976 of a law banning handgun ownership without a permit (2). It is important to note that the study, published in 1991, is limited to the years 1968 to 1988.

In a more recent paper Webster et al report changes in patterns of gunshot wounds in Washington, DC, from 1983 to 1990 (3). Their data reveal a fourfold increase in hospital admissions with gunshot wounds over the study period, with a sharp increase in the last half of 1987. The law banning gun ownership was still in effect during this time.

Should physicians and scientists conclude that there is now convincing evidence in the literature in favor of gun control? Perhaps one might conclude that gun control is ineffective, remembering that the rise in gunshot cases occurred at a time when it was still illegal to even own a handgun. Although there are numerous quotes from the Loftin paper in Dr. Lufkin's letter, he did not include the conclusion of that paper: "Comparative studies of other gun licensing laws would provide information on which to base wider generalizations and increase our understanding of the factors that influence the preventive effect of licensing laws." I would argue that until such information is available, there is no basis for action under the guise of public health. I would also remind Dr. Lufkin that it would seem pointless for medical societies to fight for restriction of private ownership of automatic rifles. By federal law, they have been illegal to own without special permit for more than 50 years.

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References

1. Lufkin RB. Handgun control: a public health imperative (letter). *AJNR: Am J Neuroradiol* 1992;13:1504–1505
2. Loftin C, McDowall D, Wiersema B, Cottey TJ. Effects of restrictive licensing of handguns on homicide and suicide in the District of Columbia. *N Engl J Med* 1991;325:1615–1620
3. Webster DW, Champion HR, Gainer PS, Sykes L. Epidemiologic changes in gunshot wounds in Washington, DC, 1983–1990. *Arch Surg* 1992;127:694–698

Reply

I appreciate Dr. Mamourian's interest and thank him for taking the time to share his views. As physicians and neuroradiologists we both share a dedication to the care of our patients, are both concerned with the danger of the growing violence in our society, and are striving to define appropriate solutions. Personally, I think the idea of the abolition of all firearms may be naive and inappropriate in our world today; however, I also feel that many of the extreme positions advocated by the National Rifle Association and similar organizations are also unrealistic.

Dr. Mamourian raises several issues in his letter to which I would like to respond. The Loftin article was cited not as an isolated publication but rather as a recent example of a growing literature in which the same conclusions are becoming overpoweringly clear.

I would certainly agree with Dr. Mamourian in his second comment that the newer Webster paper does indeed show a dramatic increase in hospital admissions for gunshot wounds beginning in the year 1987. There is no question that violence in our society is on the increase and is in this case reflected in the hospital admission figures. These facts seem only to beg the question of how high the admission figures might have been without such a restrictive handgun-licensing law in place.

In response to his third comment suggesting that the conclusions of the authors of the Loftin article are tentative or equivocal, I would quote the authors when they state, "The data from the District of Columbia provides strong evidence that restrictive licensing of handguns reduced gun related homicides and suicides . . ."

Finally, in response to Dr. Mamourian's opinion that it is pointless for medical societies to fight for the restriction of automatic weapons, I would quote the closing three sentences of the Webster article: "While well controlled epidemiological studies could provide more precise estimates of the degree to which high capacity semi-automatic guns are more harmful than other handguns, the design of these guns may be so inherently dangerous to public safety that immediate legislative action is warranted. The American Medical Association and the American College of Surgeons have called for legislative efforts to restrict civilians access to high capacity, high rate of fire automatic firearms. The enactment and enforcement of such restrictions should reduce the number and severity of firearm injuries" (1, 2).

Although I do differ with Dr. Mamourian's interpretations, I do stand by the original conclusions of my letter and the stated conclusions of the authors of the papers that Dr. Mamourian references. This is clearly an important issue, and we as physicians must push aside political issues and consider these scientific facts if we are to begin to address this growing public health problem effectively.

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References

1. American Medical Association, Substitute Resolution 264. June 1989;89:385
2. Statement on gun control. *American College of Surgeons Bulletin.* 1991;76:2

Editor's note: The previous letters represent opposing views on an extremely controversial issue that has both public health and political implications. In all of the correspondence on this issue, I have asked both authors to restrict their remarks to the public health issues. I think the journal has fulfilled its obligation by presenting reasoned views on both sides of this issue without entering into a political debate, for which this journal would not be a proper forum.