Cardiac Complications of Vaccines

We read with interest the recent study by Eckart et al. (1) entitled “Incidence and Follow-Up of Inflammatory Cardiac Complications After Smallpox Vaccination.” Although smallpox is the most common vaccine that is associated with myocarditis, other vaccines have also been linked with myocarditis, such as diphtheria–tetanus–polio vaccine, tetanus vaccine alone, cholera, typhoid–cholera, and variola vaccines (2–6). In order to assess any relationship between smallpox vaccination and myocarditis more accurately, it would be essential to know what other vaccines were administered to the military personnel in the study. Moreover, was there any relationship between specific lot numbers and myocarditis?

REFERENCES


REPLY

We appreciate the comments of Dr. Kula and colleagues regarding our publication on vaccinia-associated myocarditis (1). We agree with the need to consider the possible contributions of other vaccinations to myocarditis, and we recognize the potential for confounding. Our group recently published data revealing no statistically significant association of development of vaccinia-associated myocarditis in those with concomitant administration of other vaccines (2). Other vaccines in addition to vaccinia in cases of myocarditis may have included anthrax, typhoid, hepatitis A, hepatitis B, influenza, meningococcal, MMR (measles, mumps, rubella), poliovirus, and yellow fever vaccines. No association was seen between specific lot numbers and development of myocarditis.

We note that all the available references cited by Kula and colleagues were isolated case reports relating to other vaccines (3–6). Although they raise interesting questions, the reported observations are less persuasive than the extended case series we have reported (1,2). Recognizing that our experience is not within