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To the EDITOR

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Sir:

The informative article on forensic reform (CEN June 25, 2012, pp. 32-34) well describes many problems in data obtained by forensic analysis and the work of medical examiners. As a former district medical examiner in Florida and long time consultant to medical examiners, I applaud the effort to bring quantitative measures to the field. At the same time, an even more fundamental problem is not discussed in the article: accounting for the pathogenesis and physical presentation of natural conditions which mimic common findings of trauma in cases of death from uncertain causes. One cannot dispute a clear bullet pathway in the brain or through the heart, with the expected findings at autopsy. In the realm of alleged child abuse, however, the equation "bleeding or contusion = criminal abuse or trauma" is too often a leap to judgment, setting into motion subsequent care for the injured and interpretation of the pathological findings later. I have yet to see a case of alleged *shaken baby syndrome* in which the medical examiner took the time to dissect the upper cervical spinal column to determine whether there was in fact resultant injury at the key site. Similarly, meningitis is very often missed in emergency rooms, and at autopsy. Slowly maturing infants born more than a few weeks early will commonly have healing lesions along the margins of the cerebral ventricles which rebleed spontaneously. Very immature infants are occasionally deficient in ascorbic acid which leads to such hemorrhages. The better known tendency of children with *osteogenesis imperfecta* to develop fractures even from loving hugs of a parent is simply the tip of the iceberg of an inadequate application of what is known about the spectrum of findings consistent with and fully explained by a deeper understanding of natural disease. The efforts described are both long overdue and a good start. This failure has impact on civil litigation as well. I recall a case of an obstetrician whose medical license was challenged prefatory to a suit for damages because of massive uterine hemorrhage during delivery, with stillbirth the result. Fortunately both the placenta and the fetus were critically examined; there was a subclinical state of lupus with thrombocytopenia which determined the outcome, rapid delivery for fetal distress notwithstanding. The challenge failed and no suit was brought. Another aspect of these things should also be addressed: forensic experts need to take the time to carefully explain to family and friends of the deceased as to what actually happened when study of the case indicates an outcome due to natural causes.

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