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Medical Diagnoses Commonly Associated With Pediatric Malpractice Lawsuits in the United States

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Medicine is a calling. Medicine is a profession. Medicine is a business. People in business get sued.

Gary N. McAbee, DO, JD

ABSTRACT

In this article we discuss the medical diagnoses underlying the most common lawsuits involving pediatricians in the United States. Where applicable, specific and general risk-management techniques are noted as a means of increasing patient safety and reducing the risk of medical malpractice exposure. Pediatrics 2008;122:e1282–e1286

Medical malpractice litigation continues to be at a crisis level in 17 states. This level has declined from a peak of 22 states designated to be in crisis by the American Medical Association and, in part, represents the effort of tort reform in some regions of the country. There must be continual efforts to find ways to reduce pediatricians’ risks of medical malpractice litigation. Since 1989 the American Academy of Pediatrics Annual Survey of Fellows has consistently found that nearly one third of all pediatricians will be sued during their careers. Pediatricians have a unique exposure to liability issues because of the severity of the indemnities paid in settlements and jury awards.

Two recent publications in Pediatrics addressed the malpractice situation as it relates to pediatrics. Kain and Caldwell-Andrews reviewed data from the National Practitioner Data Bank and noted significant variability within the United States regarding the incidence of malpractice payments and the median payment amount. Carroll and Buddenbaum reviewed data from the Physician Insurers Association of America (PIAA), a trade association of medical malpractice insurance companies in the United States. Their review noted, in part, that although only 28% of lawsuits resulted in an indemnity, the cost of defending these suits was alarmingly high: mean defense costs were $28,779 for cases in which no indemnity was paid and $67,502 for paid claims. Pediatrics was the fourth highest among 28 specialties in terms of mean defense expenses.

The specific medical diagnoses that underlie the most common lawsuits involving pediatricians have not yet been systematically analyzed. This is important to practitioners, because the law is based on precedent and successful legal claims may encourage similar claims in the future. Thus, if an attorney is aware that a drug-induced adverse effect resulted in a large monetary settlement or verdict, it is likely that a lawsuit will be filed on behalf of a future client who presents with the same drug-induced adverse effect. If pediatricians are knowledgeable about the medical conditions that have produced successful malpractice suits, they can institute risk-management techniques that can be effective for both improving patient safety and reducing risk of liability. An excellent example of this is the American Society of Anesthesiologists (ASA). More than 20 years ago the ASA created its closed claims-analysis project. By instituting risk-management techniques to improve patient safety, anesthesiologists decreased their liability risk as a group from one of the most frequently sued specialties to a current rank of 20th of the 28 medical specialties listed.

In this article we analyze data from the data-sharing project of the PIAA from the years 1985–2006. The medical conditions commonly associated with lawsuits against pediatricians were identified (see Table 1). The focus of this analysis relates to allegations of diagnostic errors, because this is the most common cause of action underlying the major medical misadventure in pediatric malpractice closed claims (see Table 2). Some risk-management techniques
that may reduce the potential risk of misdiagnosis and liability risk associated with these conditions will be discussed. It should be noted that although an insurance database relating to medical malpractice may contain a wealth of claims data, it is also likely to be incomplete and even fragmented. Thus, analyzing every question related to clinical care and subsequent malpractice action may not be possible. Nevertheless, the information provided should be invaluable to the practitioner.

MENINGITIS

Meningitis continues to be a major issue among pediatric malpractice allegations, resulting in one of the most expensive medical conditions in regard to average indemnity costs and average costs to defend. From a malpractice perspective, the PIAA Meningitis Claims Study noted that meningitis lawsuits are predominately a pediatric problem. The median age of the patient with a meningitis claim was 2 years, indicating the large number of infants and toddlers involved. Sixty percent of claims involved patients <2 years of age. In 82.6% of meningitis claims that involved patient death, the patient was <1 year of age. The highest average indemnity ($433,464) was paid on behalf of pediatricians who were the most frequently sued physician group for this diagnosis.

The high expense of these claims relates to the long life expectancy of a child with neurologic sequelae as well as the higher rate of mortality. Generally, any pediatric malpractice case that involves a death has both a higher incidence and amount of a payout. The most common cause of action in meningitis cases was delay in diagnosis. Relevant to the progression of symptoms is that the time between first examination and diagnosis was 3 to 24 hours in 43.8%; treatment was sought within 24 hours of symptom onset in 57.5%; and antibiotics were given within 24 hours of contact in 49.3% of the cases. The initial contact varied (office, 35.6%; emergency department, 30.1%; telephone, 17.8%; hospital, 9.6%; urgent care/home visit, 5.5%). The average payout was twice as high when initial contact was with a nurse (12.3% of claims). Also, payout for claims resulting from telephone-based care was one third higher than for those resulting from non-telephone–based care. Sixty percent of claims resulting from telephone-based care involved children <2 years of age. Initial diagnoses for meningitis cases are listed in Table 3, and presenting symptoms and their frequency are listed in Table 4. An important statistic for the practitioner is that 25% of children did not present with fever, and the majority of them lacked change in mental status, headache, lethargy, and neck stiffness. The absence of stiff neck is likely from the lack of meningeal signs associated with the younger age of these patients. Lumbar punctures were not performed in nearly 30% of cases resulting in claims, which probably reflects the lack of suspicion of meningitis, especially in infants and toddlers. Yet, of the claims regarding cases in which a spinal tap was not performed in a timely fashion, the average age of the patient was 7 years.

Because typical central nervous system signs and symptoms are frequently absent at presentation, risk management is challenging. There is no such thing as too high of an index of suspicion for meningitis, especially for infants and young toddlers during “flu” season. Because of the increased space that exists between the brain and the inner calvarium in an infant, a great deal of pathology can occur before the onset of neurologic

| TABLE 1 | Most Prevalent Conditions Resulting in Malpractice Lawsuits (in Order of Frequency) |
| Condition | Average Indemnity (for All Claims), $ |
| 1. Brain-damaged infant | 440,379 |
| 2. Meningitis | 437,423 |
| 3. Routine infant or child health check | 155,039 |
| 4. Respiratory problems in newborns | 270,607 |
| 5. Appendicitis | 116,285 |
| 6. Pneumonia | 239,531 |
| 7. Specified nonteratogenic anomalies | 186,708 |
| 8. Premature birth | 250,031 |
| 9. Birth | 286,407 |
| 10. Asthma | 193,414 |

| TABLE 2 | Most Prevalent Conditions in Pediatric Malpractice Claims Caused by Error in Diagnosis (1985–2006) |
| Condition | Average Indemnity (for Diagnostic Errors), $ |
| 1. Meningitis | 433,464 |
| 2. Appendicitis | 131,842 |
| 3. Specified nonteratogenic anomalies | 186,708 |
| 4. Pneumonia | 239,531 |
| 5. Brain-damaged infant | 335,804 |

| TABLE 3 | Initial Diagnoses in Cases of Meningitis |
| Condition | Percentage |
| Viral infection/influenza | 35.6 |
| Other | 24.9 |
| Meningitis | 12.3 |
| Ear infection | 12.3 |
| Gastroenteritis | 4.1 |
| Urinary tract infection | 2.7 |
| Postoperative infection | 2.7 |
| Migraine | 2.7 |
| Febrile seizure | 2.7 |

| TABLE 4 | Presenting Symptoms in Cases of Meningitis |
| Symptom | Percentage |
| Fever | 74 |
| Nausea/vomiting | 49 |
| Lethargy | 32 |
| Headache | 27 |
| Influenza symptoms | 25 |
| Change in mental status | 12 |
| Poor appetite | 11 |
| Neck stiffness | 10 |
| Surgery | 6 |
| Photosensitivity | 3 |
symptoms and signs. To assist with this high index of suspicion, use acceptable pediatric telephone triage and advice protocols when physicians are not providing telephone triage. Periodically, monitor triage and advise staff to ensure that they are adhering to your protocols and that documentation is adequate. Be sure that non-clinical staff is not providing clinical advice to parents. Be aware of “red flags” such as “a strange look” or “walking funny” or the development of progressive symptoms.

Twelve percent of the PIAA meningitis claims involved problems with the medical chart. These problems included failure to document standards of practice, failure to record pertinent negative findings relevant to the diagnosis, failure to record interactions with the patient, and failure to record referrals to other physicians. Alterations in the chart were also noted.

Communication issues were also cited as an associated problem that allegedly contributed to the delay in diagnosis because of poor communication between providers, failure to inform of critical test results, failure to provide the consultant with a complete account of medical findings to date, and failure to provide the patient with clear follow-up instructions.

APPENDICITIS

From a medicolegal perspective, appendicitis presents a particularly difficult diagnostic problem, especially in young children. The perforation rate is inversely related to the age of the patient, making diagnosis in the younger patient critical. Missed diagnoses have been reported in up to 27% of cases. Atypical symptoms and signs are not uncommon and often underlie the misdiagnosis. Atypical positive symptoms include diarrhea, vomiting before pain, upper respiratory symptoms, minimal right lower quadrant pain, and constipation. Atypical negative symptoms include lack of fever, absence of rebound or guarding, normal appetite, and normal (or increased) bowel sounds. Some patients are seen twice before the correct diagnosis is made. Female adolescents are frequently misdiagnosed, with symptoms attributed to pelvic inflammatory disease or urinary tract infections.

Common misdiagnoses are listed in Table 5. PIAA claims with failure to diagnose as the cause of action paid out 36.7% of the time for an average indemnity payment of $131,842.

NONTERATOGENIC ANOMALIES/CONGENITAL ANOMALIES OF THE GENITAL ORGANS

Overall, the average indemnity payout for specified non-teratogenic anomalies was $197,707. Claims for non-teratogenic anomalies are usually a result of a failure to diagnose (>50% of claims) rather than failure to refer (3% of claims). Nevertheless, subspecialty referral may be indicated, because these conditions may be a component of an underlying genetic syndrome.

Developmental dysplasia of the hip (DDH) previously represented nearly three quarters of the claims in the PIAA database. However, this frequency has been decreasing over the years, presumably because of better awareness of the condition with earlier and better diagnosis, particularly since the advent of ultrasound technology. DDH is an example of a condition for which identification of certain risk factors can translate into effective risk management. Risk factors for DDH are present in up to 25% of cases and may include female gender, breech presentation, cesarean section, oligohydramnios, family history of DDH, being firstborn, heredity (eg, Italian, Native American, Japanese), associated neuromuscular conditions such as torticollis and metatarsus adductus, and possibly swaddling. However, absence of risk factors should not reassure a practitioner that DDH is not present. The average indemnity paid for a misdiagnosis of unilateral and bilateral DDH was $100,000 and $200,000, respectively.

Other common causes of action for non-teratogenic anomalies and congenital anomalies of the genital organs and median indemnity amounts are listed in Tables 6 and 7.

PNEUMONIA

Compared with other diagnoses, fewer closed claims resulted in a payout for failure to diagnose pneumonia. Nevertheless, this diagnosis resulted in the second highest average indemnity paid out since 2001. There are few specific data that permit specific recommendations for risk management for this condition. Pneumonia is typically divided into 2 clinical types: community-acquired pneumonia (CAP) and nosocomial pneumonia. Although there are several clinical guidelines for managing CAP in adults, guidelines for CAP in children have not been universally accepted. Thus, there are variations relating to diagnosis of children with this condition. The average indemnity for errors in diagnosis relating to pneumonia was $396,318.
BRAIN-DAMAGED INFANTS
Virtually any medical scenario in which an infant or child has sustained brain damage is highly likely to result in a lawsuit. These claims tend to relate to newborns. Examples include head injury from a fall after an abrupt vaginal delivery, profound developmental delay from inadequate hydration of a dehydrated newborn, and development secondary to failure to timely diagnose and treat hypoglycemia. Typical reasons for initiating a lawsuit for a neonatal brain-injury claim have been reported to include concerns for a medical “cover-up,” the parents’ need for medical information about their infant, the need for financial support to help care for the infant over a lifetime for a child whose parents do not recognize a future, dissatisfaction about communication between physicians and parents, and desire for revenge. In 70% of cases, the parent expressed dissatisfaction that caretakers did not warn him or her about the possibility of long-term neurodevelopmental problems. The latter point suggests that parents do not like “surprises” when they are told later that their child is developmentally delayed because of events during the newborn period.

Average indemnity payments for a brain-damaged infant are among the highest for pediatric claims (average indemnity: $440,379 [for all claims] and $335,804 [for claims relating to diagnostic error]).

MEDICATION ERRORS
Issues related to medication are relevant to all medical diagnoses and account for >5% of malpractice cases involving children. A review of the PIAA data reveals valuable information about malpractice claims relating to medications.

In pediatrics, it is not surprising that allergy and respiratory medications are the most commonly prescribed classes of drugs, are frequently the basis for malpractice actions. The average indemnity paid for these classes of drugs was $325,676 for asthma medications and $180,140 for bronchitis medications. However, the third class of drugs commonly associated with malpractice claims involves the anticonvulsant drugs, with an average indemnity paid of $97,500. Studies have raised concerns about pediatricians’ knowledge about the pharmacokinetics of some anticonvulsant medications.

Errors arise in 1 of 4 ways: ordering (56% of errors); administration (ie, wrong dose, drug, timing, or technique) (34% of errors); transcription (6% of errors); and dispensing (4% of errors).

PIAA data show that 14% of medication claims are allergy related. These claims fall under 3 categories: failed to ask about drug allergy; asked about and previously documented drug allergies but failed to read the medical chart; and failed to re-ask about recent development of drug allergy. Physician-related mistakes occurred in 69%, nurse-related mistakes in 13%, and pharmacy-related mistakes in 8% of the claims. Thirty-seven percent of cases involved an incorrect dosage, an inappropriate drug, or failure to monitor adverse effects.

Practitioners should inquire about drug allergies every time a prescription is written. Practitioners should also consider prescribing anticonvulsant drugs in close consultation with the appropriate specialists. For pediatric inpatients, computerized prescriber order entry systems have been effective in reducing the incidence of adverse drug events.

PEDIATRICIANS PRACTICING IN EMERGENCY SETTINGS
Pediatricians practicing in emergency settings must be especially cognizant of the common causes of malpractice suits. An analysis of the PIAA database regarding pediatric lawsuits arising in an emergency department setting from 1985 to 2000 noted that common causes of malpractice suits involved meningitis, neurologically impaired newborns, and pneumonia in suits involving children <2 years old; fracture, meningitis, and appendicitis in lawsuits involving children from 3 to 11 years old; and fractures, appendicitis, and testicular torsion in lawsuits involving children from 12 to 17 years old. Cases in which death occurred often related to meningitis and pneumonia.

GENERAL RISK-MANAGEMENT TECHNIQUES
Some generalized risk-management techniques are useful regardless of the medical diagnosis. These techniques include:

1. Document all pertinent positive and negative clinical findings. For example, meningeal signs may be lacking in a patient with meningitis, and the proper diagnosis may be missed. However, the physician who has documented the absence of meningeal signs has provided some evidence that he or she considered the possibility of this condition and has properly evaluated the child.

2. Document carefully. The medical chart should contain the information that the physician would want present if a claim were to be made in the future. Entries should be clear, complete, and free of flip-pant, critical, or other inappropriate comments. Whenever writing on a medical chart, assume that “Dear Mr/Ms Attorney” is written at the top. One day this is who may be reading it.

3. Although there are differences of opinion about how much to write in a medical chart, quality is always preferred over quantity.

4. When appropriate, do not underestimate the importance of referring to specialists.

5. If a patient has identified risk factors for a specific condition, visibly and clearly “red flag” the front of the chart as a reminder to check for the condition at each visit. This is especially important for conditions such as DDH, for which the age of onset and diagnosis vary widely.

6. Communication and use of terminology is critical. Numerous studies have demonstrated that poor communication between physicians and parents/patients is the catalyst for most medical malpractice lawsuits. Good communication involves the use of layman’s terms and the avoidance of medical jargon.
7. Avoid language that blames (eg, unintentionally, inadvertently) or embellishes (eg, profound, excessive) unless it is relevant to medical care.

8. Correctly label conditions such as DDH as “developmental” rather than “congenital” so that it does not lead a parent to believe that the condition should have been diagnosed soon after birth.

9. Medications should be written as mg/kg per time period. Ask about drug allergies every time a prescription is written.

10. Similar to the 3 rules of real estate (location, location, location), the 3 rules of medical malpractice are damages, damages, damages. Careful and extensive documentation is critical with patients likely to sustain long-term sequelae.

11. The Institute of Medicine has noted that half of Americans, even among the well educated, do not understand basic health information. Furthermore, many Americans lack good reading skills. Verbal instructions should be simple, clear, and concise. Written material provided to patients should be written at an eighth-grade level.

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