

Infants' Sense of Pain Is Recognized, Finally

By PHILIP M. BOFFEY
Published: November 24, 1987

Newborns do feel pain.

Parents don't have to be told that, and many pediatricians don't either. But the contrary belief - that the smallest babies are such primitive organisms that they are oblivious to pain - has persisted for decades among many physicians who have routinely operated on these children with little or no anesthesia.

They did so for the purest of reasons, fearing that potent anesthetics might kill these seriously ill infants.

But now, medical evidence demonstrating the newborn's capacity for pain is building. Anesthesia has become safer, too. And in recent months, various groups have issued policy statements urging painkillers for these infants.

To any parent who has held a newborn, the important questions are not about the pain, but about the medical establishment that took so long to come to the conclusion it has only recently reached. How could a profession dedicated to healing end up inadvertently inflicting needless pain on its tiny charges for several decades? No Pain-Killing Drugs

Typically in the past, an anesthesiologist would simply administer a drug to paralyze the muscles, so that the infant would not thrash around on the operating table during major surgery. Some infants were also given nitrous oxide, or laughing gas, a weak anesthetic that diminishes but does not eliminate pain.

The practice of withholding drugs was widespread in the United States and other countries from the 1940's until at least the late 1970's. In one survey of medical literature, 77 percent of all the newborns who underwent surgery throughout the world between 1954 and 1983 to repair a serious blood vessel defect called patent ductus arteriosus received only muscle relaxants or relaxants plus intermittent nitrous oxide.

The picture is changing rapidly. Most American hospitals are now believed to give anesthesia for major surgery. But some anesthesiologists are said to persist in the old ways, and many hospitals still decline to give even a local anesthetic for minor procedures such as circumcision.

The failure to relieve pain was a "barbarous" and "nasty business", according of Dr. John W. Scanlon, director of neonatology at the Columbia Hospital for Women in Washington.

Few other experts would put it so harshly. But a joint policy statement issued by the American Academy of Pediatrics in September and approved by the American Society of Anesthesiologists the following month cited "an increasing body of evidence" that newborns, including those born prematurely, show physiologic responses to surgery that can be relieved by anesthetics. An editorial in The New England Journal of Medicine last week called the evidence "so overwhelming that physicians can no longer act as if all infants were indifferent to pain."

Better pain relief for tiny infants has clearly been possible for a long time. For almost 20 years, doctors at some academic medical centers have been safely giving anesthetics to premature babies. And over the past decade, the development of new monitoring equipment, new anesthetic agents and new technologies for administering them have greatly reduced the risks.

A deeper reason for the failure can be found in science, now regarded as faulty, that allowed ill-founded beliefs about newborns to take root. The notion that babies do not feel pain stems from studies in the 1940's indicating that newborns did not respond to pinpricks by pulling their limbs away as an older infant would. Unproven Theories

A wide range of unproven theories was voiced to "explain" how this was due to an immature nervous system or other physiologic factors. Today, it is recognized that these studies, and others later, had serious flaws. Now doctors know that infants utter unique cries and secrete high levels of stress hormones in response to pain, and that their pain pathways and brain functions are more mature than previously thought.

The failure to provide anesthesia was also fostered by the fragmentation of modern medicine. The pediatricians and neonatologists most apt to be concerned about the pain were often unaware that the anesthesiologists in the operating room were withholding drugs. And the new knowledge about infant pain has been slow to diffuse because much of it was published in specialized neurological journals seldom read by the doctors who care for the infants.

Only after parents and other laymen raised a cry about needless suffering, and some filed lawsuits, was there enough pressure to change.

The long failure to provide anesthesia for newborns provides a salutary reminder that medical practices are sometimes based on flimsy science and erroneous beliefs, and that outside critics can bring an important perspective.

Indeed, with the benefit of hindsight, the anesthesiologists who withheld painkillers all those years would probably admit they made a mistake, said Dr. Frederic A. Berry of the Children's Medical Center of the University of Virginia. "But they were doing it for what they thought were good reasons at the time," he said. "You can question their methods, but not their motives."

[Home](#) | [Times topics](#) | [Member Center](#)

[Copyright 2012](#) | [The New York Times Company](#) | [Privacy Policy](#) | [Help](#) | [Contact Us](#) | [Work for Us](#) | [Site Map](#) | [Index by Keyword](#)