

BOOK REVIEW: SINISTER SCIENCE (Scientific American Vol. 277 Issue 5, p118, Nov97)
Review by Rebecca Zacks

The Death of Innocents: A True Story of Murder, Medicine, and High-Stakes Science

5 BY RICHARD FIRSTMAN AND JAMIE TALAN Bantam Books, New York, 1997 (\$24.95)

For reasons that remain inscrutable to doctors, babies sometimes die silently and unexpectedly in their cribs, victims of sudden infant death syndrome (SIDS). For reasons that seem unfathomable to most of us, parents sometimes murder their own infants and try to pass the deaths off as natural or
10 accidental tragedies. In a small number of cases, the former may serve as a cover for the latter. As journalists Richard Firstman and Jamie Talan reveal in this riveting account, that is exactly what happened in June 1970 and again a year later when Waneta Hoyt, a young mother in upstate New York, smothered her fourth and fifth children. Molly and Noah Hoyt, both less than three months old at the time of death, had spent most of their lives in a hospital clinic attached to machines that
15 monitored their every breath. Waneta had already lost three children to mysterious causes, and so the babies were at risk for SIDS, her doctor believed. The last two deaths seemed only to confirm his suspicion, despite the odd circumstance that all Waneta's children died at home while alone with her. Autopsies on the two infants were inconclusive (no surprise: even under the pathologist's discerning gaze an intentionally smothered baby often looks no different from one who has stopped
20 breathing for less sinister causes). The doctors attributed Molly's and Noah's deaths to SIDS, and their mother walked free for more than two decades thereafter.

The Hoyts' story is the thread that ties together a stunning examination of **the interplay between criminal justice and medical research in the emotionally charged world of SIDS**. In 1972 Alfred Steinschneider, the physician who had studied the Hoyt babies before their deaths, published
25 a paper in the prestigious journal Pediatrics. Based on his observations of the infants, Steinschneider advanced what would become known as the apnea theory of SIDS. In essence, it suggested that during sleep some babies stop breathing for abnormally long periods (some short pauses are common) that occasionally prove fatal. Steinschneider further proposed that SIDS might run in families and that potential SIDS victims could be identified and protected if their breathing were
30 carefully monitored.

Firstman and Talan piece together the genesis and impact of the apnea theory, drawing on thousands of pages of medical records, legal documents and scientific publications, along with interviews with more than 300 people. Their dissection of the 1972 paper describes Steinschneider's data as shaky in some places and blatantly inaccurate in others. The authors also examine **the scientific and**
35 **cultural conditions that favored the apnea theory**. Despite its serious flaws, Steinschneider's paper shaped research agendas and popular beliefs and launched a lucrative business in home apnea monitors: by 1990 manufacturers were pulling in \$40 million annually.

Though more than two decades of subsequent research failed to support Steinschneider's assertions, Firstman and Talan write, those assertions continued to crop up in the courtroom. During those
40 years, **an attorney defending a parent accused of the serial murder of his or her children** was likely to point to the paper as proof that SIDS can be familial. As former Dallas medical examiner Linda Norton explained in 1985 to a district attorney prosecuting yet another case of serial infanticide, "It's the defense in cases like this. It's apnea. It's SIDS. It runs in families."

Norton's testimony in 1986 helped the D.A. win a conviction. Moreover, her frustration and passion
45 inspired that D.A. to begin digging into the Hoyt case. Science was being used to subvert justice; as Norton told the authors, "serial SIDS more than likely meant serial homicide." Some researchers estimate that 5 to 10 percent of the deaths attributed to SIDS may in fact be homicides, Firstman and Talan note.

A powerfully told detective story, *The Death of Innocents* ends with little sense of resolution. In
50 1995 Waneta Hoyt was finally sentenced to 75 years to life imprisonment for the murders of five of her children. Yet Steinschneider declined to write a correction to his 1972 paper. **The same apnea theory that has been used as a cover for infanticide** still occasionally finds its way into pamphlets, newspapers and--frighteningly--medical school classrooms.