

Cosmetic surgery and patient safety: relevant US studies

It has been shown in the United States that hospitals determining clinical privileges based on incomplete and inaccurate information regarding the education, training, experience, and proven competence of the physicians performing cosmetic surgery, place cosmetic surgery patients at risk. In considering a physician's request for hospital privileges, some hospitals take the position that board certification in plastic surgery renders a physician qualified to perform cosmetic surgery. However, according to some literature, cosmetic surgery patients choosing their physician based solely on the physician's underlying board certification are being harmed. Several studies, including the twelve summarised below, found significantly higher rates of morbidity, mortality and malpractice claims among board certified plastic surgeons over all other medical specialties performing certain cosmetic procedures.

1. **Schulte F, Bergal J, *Lack of Regulations Heightens Surgical Risks—Cosmetic Office Procedures Largely Go Unregulated Because The State Has No Way To Track Them.* Fort Lauderdale Sun Sentinel. Nov. 30, 1998:1A/9A.**

In a series of articles looking into deaths resulting from liposuction surgery, this newspaper study found **80 percent of injury claims were attributed to board certified plastic surgeons**. The article concludes by noting: "certification by a recognised board does not necessarily guarantee good results for patients."

2. **Gorney M, *The Wheel of Misfortune – Genesis of Malpractice Claims,* Clin Plast Surg. Jan 1999; (1):15-19.**

The author surveyed 700 malpractice claims against board certified plastic surgeons over a 15 year period and concluded: "[i]n surveying the genesis of patient complaints against plastic and reconstructive surgeons, we have examined approximately 700 cases over 15 years of experience. Sadly, it is evident that from the standpoint of the medical liability carrier, board certification in plastic and reconstructive surgery is not necessarily the hallmark of the claims-free surgeon. Although the loss experience of surgeons certified by the American Board of Plastic Surgery is kept strictly separate from claims resulting from cosmetic surgery procedures performed by other specialists, **the overwhelming number of significant claims in aesthetic [cosmetic] surgery arises mainly from board-certified plastic surgeons.**"

3. **Grazer FM, de Jong RH, *Fatal Outcomes from Liposuction: Census Survey of Cosmetic Surgeons.* Plast Reconstr Surg. Jan 2000; 105: 436-446.**

The authors reported that based on a survey of board certified plastic surgeons, **liposuction patients of board certified plastic surgeons experienced the**

“high mortality rate” of conservatively 1 in 5000 or 19.1 per 100,000 during the period of 1994 to mid-1998. The authors noted that their findings were corroborated by a 1997 American Society of Plastic and Reconstructive Surgery survey which found a 20.6 per 100,000 mortality rate. The authors noted, **“[s]o high a mortality rate, approximately 20 deaths per 100,000 elective outpatient procedures, should give pause.”** The authors continued noting, **“[m]ore sobering perhaps is the comparison with traffic deaths - a common killer of largely healthy Americans - at a rate of 16.4 percent per 100,000 in 1996.”** The authors conclude stating, **”[t]his less than optimal outcome calls for reconsideration of patient safety, procedural limitations, and post operative care guidelines, as well as physician qualification and accreditation issues.**

4. **McMenamin P, *Just the Facts, Ma’am...*, Cosmetic Surgery Times, Vol. 3, No. 2, March 2000.**

The author reviewed several studies and articles which collectively indicated that **board certified plastic surgeons suffer significantly higher morbidity and mortality rates compared to other specialties performing cosmetic procedures, higher rates of malpractice claims compared to other specialties performing cosmetic procedures, and do not receive adequate training in cosmetic procedures as part of their board certification in plastic surgery.** He based his conclusion on the following studies and reports: May 1999 New England Journal of Medicine: **4 out of 5 liposuction death cases reported in New York involved a board certified plastic surgeon;** January 2000 Plastic and Reconstructive Surgery: **board certified plastic surgeons experienced a 1 in 5000 liposuction mortality rate;** 1998 Fort Lauderdale Sun Sentinel: **80 percent of cosmetic procedure injury claims were attributable to board certified plastic surgeons;** May 1999 Dermatologic Surgery: **office-based liposuction performed by plastic surgeons resulted in 50 times as many claims as compared to office-based liposuction performed by dermatologists and 154 times as many claims when performed in a hospital.**

5. **Coleman WP, Hanke CW, Lillis P, Berstein G, Narins R, *Does the location of the Surgery or the Specialty of the Physician Affect Malpractice Claims in Liposuction?*, Dermatol Surg 25:5: May 1999: 343-347.**

The authors reviewed data regarding malpractice claims from the Physicians Insurance Association of America (PIAA) Data Sharing project. After reviewing this data, the authors found that although board certified plastic surgeons perform more liposuction procedures than dermatologists (a 3:2 ratio), PIAA data reveals **plastic surgeons have an overwhelming majority of liposuction malpractice claims** (a 113:1 ratio). This holds true in hospital and office-based liposuction. Office-based liposuction by plastic surgeons resulted in 50 times as many claims as office-based liposuction by dermatologists. Hospital-based liposuction by plastic surgeons resulted in 154 times as many cases as by dermatologists. The

authors attributed this difference to plastic surgery educational programs and articles which, “often emphasise liposuction performed in larger volumes under intravenous sedation or general anesthesia often as a combined surgery with other procedures.” The authors go on to note, “[i]t is not surprising that more malpractice claims have resulted from this more aggressive form of liposuction.”

6. **Coleman WP, Hanke CW, Glogau, RG, *Does the Specialty of the Physician Affect Fatality Rates in Liposuction? A Comparison of Specialty Specific Data, Dermatol Surg 26:7: July 2000:611-615.***

The authors reviewed several liposuction studies conducted by different surgical specialties and ***concluded the liposuction fatality rate is significantly higher among board certified plastic surgeons than among other specialties.***

7. **Coldiron B, *Office Surgical Incidents: 19 Months of Florida Data, Dermatol Surg, 28:8 August 2002, 710-713.***

The author reviewed 19 months of mandatory reporting data from physicians performing office-based procedures in the State of Florida resulting in death, serious injury, or a hospital transfer. The author found that based on this data, ***board certified plastic surgeons accounted for 50 percent of reported deaths (4 of 8) and 50 percent of injuries requiring a hospital transfer (14 of 28).*** The author also noted that the single greatest cause of death was liposuction under general anesthesia. See *Article 5 above.*

8. **Coldiron B, Shreve E, Balkrishnan R, *Patient Injuries from Surgical Procedures Performed in Medical Offices: Three Years of Florida Data, Dermatol Surg 30:12: December 2004, 1435-1443.***

The authors reviewed three years (March 1, 2000 – March 1, 2003) of mandatory reporting data from physicians performing office-based procedures in the State of Florida resulting in death, serious injury, or a hospital transfer. ***Of the 13 deaths reported 7 appeared to involve cosmetic procedures all of which were performed by board certified plastic surgeons.*** Of the 43 office-based procedures resulting in hospital transfers, ***25 appeared to involve cosmetic procedures, all but two of which were performed by board certified plastic surgeons.***

9. **Coldiron B, Fisher AH, Adelman E, Yelverton CB, Balkrishnan R, Feldman MA, Feldman S, *Adverse Event Reporting: Lessons Learned from 4 Years of Florida Office Data, Dermatol Surg 31: 9: Part 1 September 2005, 1079-1093.***

The authors reviewed four years (March 1, 2000 – March 1, 2004) of mandatory reporting data from physicians performing office-based procedures in the State of Florida resulting in death, serious injury, or a hospital transfer. ***Of the 19 deaths reported, 11 involved board certified plastic surgeons. Of the 58 office-***

based procedures resulting in hospital transfers 62.1 percent involved board certified plastic surgeons.

10. **Clayman MA, Seagle BM, *Office Surgery Safety: The Myths and Truths behind the Florida Moratoria – Six Years of Florida Data*, *Plast Reconstr Surg*, 18:3, 2006, 777-785.**

In this article published in *Plastic and Reconstructive Surgery - Journal of the American Society of Plastic Surgeons*, the authors purported to review six years of mandatory reporting data from physicians performing office-based procedures in the State of Florida resulting in death, serious injury, or a hospital transfer. The authors found that ***of the 20 deaths they attributed to plastic (cosmetic) procedures, 11 were attributed to board certified plastic surgeons all of whom had hospital privileges.*** Amazingly, despite the fact that more than 50 percent of the deaths, by their own count, were attributed to board certified plastic surgeons with hospital privileges, the authors concluded patient safety is enhanced by requiring board certification and hospital privileges. Shockingly, the authors' recommendation results in limiting patients' choice to board certified plastic surgeons with hospital privileges.

11. **Coldiron B, *What Five Years of Florida Data Show About Office Surgery Safety*, *American Journal of Cosmetic Surgery*, 23:4, 2006, 179-189.**

The author reviewed five years (March 1, 2000 – March 1, 2005) of mandatory reporting data from physicians performing office-based procedures in the State of Florida resulting in death, serious injury, or a hospital transfer. The author concluded based on this data ***that board certified plastic surgeons are responsible for 93 percent of deaths (14/15) and 91 percent (52/57) of hospital transfers after cosmetic surgery.***

12. **Coldiron B, *Office Surgery Incidents: What Seven Years of Florida Data Show Us*, 2008 *American Society for Dermatologic Surgery, Inc.*, 2008:34:108.**

The author reviewed seven years (March 1, 2000 – March 1, 2007) of mandatory reporting data from physicians performing office-based procedures in the State of Florida resulting in death, serious injury, or a hospital transfer. The author concluded based on this data ***that board certified plastic surgeons are responsible for 58 percent of all deaths and 83 percent of cosmetic surgery deaths, and 52 percent of all hospital transfers and 83 percent of hospital transfers after cosmetic surgery.*** Eight of the 31 deaths occurred after liposuction performed by a plastic surgeon, the single most common cause of death. Of these 8 cases, 7 were performed under general anesthesia and the deaths were attributed to pulmonary emboli in 4 and unknown causes in 3 cases. There was 1 death after liposuction with intravenous sedation. See *Article 5 above*.

