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Voices of Medicine



By Del Meyer, MD

Death of the medical autopsy; DOs in primary care; stress and the President's brain?

Remember the Autopsy?

Dr. Scott Sattler discusses "Medical Autopsy: The Forgotten Teacher" in the March 2009 issue of the Humboldt-Del Norte County Medical Society *Bulletin*.

Remember when we used to do autopsies on other than just coroner's cases? When I trained at Valley Medical Center in San Jose in the 1960s and 70s, essentially every hospital death went to autopsy unless the family re-quested otherwise and the resident couldn't persuade them differently. The involved medical staff would usually at-tend the procedure. Weekly morbidity and mortality conferences (M & M's) would discuss the case and correlate the pathologic findings with the premortem diagnoses. It was often a humbling experience.

In the mid-1980's, data showed that such autopsies revealed a major misdiagnosis of the primary cause of death in 20 to 40% of cases. In 10 to 15% of all cases, the missed diagnoses would likely have affected patient outcome. Did I mention that autopsies are a humbling experience?

When I first came to Humboldt County (to the Hoopa Indian Reservation to be exact) in 1974, the tradition of medical (as opposed to forensic) autopsy was still going strong. I well remember the woman with advanced diabetes whose chemistries and comfort just couldn't be controlled and, despite intensive care and multiple specialty consulta-tions, whose deterioration was unstoppable. I remember her, in great part, because of her autopsy. The vision of her large undiagnosed pituitary tumor and the dent it had made on her optic chiasm is burned onto my permanent intrac-ranial hard drive. Before that day pituitary tumors were a theoretical construct I'd learned about in med school. That day they became real.

When I moved my practice to Eureka in 1982 we were still doing medical autopsies, but over the years they be-came fewer and fewer. Out of curiosity I went over to the Coastal Pathology office the other day and talked with them about it. They showed me the book where they record all the autopsies done by their group (and by the Humboldt Central Pathology group which preceded them). It contains records going back to 1983, when 40 medical autopsies were performed. By 1986 it had dropped to 30, and by 1989 to 16. There were only 9 done in 1991. By 1999, only 4. In 2005 there were just 2 and there have

been none done in the area served by Coastal Path (Humboldt and Del Norte counties) since June of 2007, almost two years ago.

We have lost a helpful friend and an inspiring teacher. On this part of the North Coast, medical autopsy is no more.

Read the entire article at www.humboldt1.com/~medsoc/images/bulletins/2009-03%20MARCH%20BULLETIN_for%20web.pdf

Osteopaths in primary care

Dr. Stephen Kamelgarn discusses why osteopaths are half of all new primary care physicians in the March 2009 issue of the Humboldt-Del Norte County Medical Society *Bulletin*.

At least twice in the last several months I've gone to meetings about health care where the statement (or variations, thereof) was made: "Only 7 percent of medical school grads go into Family Medicine as a specialty." Although that number seemed somewhat low, I felt that it could conceivably be real. We all know that primary care receives abysmal reimbursement from the insurers.

In 2008, there were 2,654 available Family Practice residency slots available, and 2,404 were filled (90.6%). Now, if only 1,200 MD's elected to go into Family Medicine and 2,400 slots were filled, who made up the other 1,200? Well, it turns out that the remaining 1,200 slots were filled by graduate DO's. (This isn't exactly rocket science math, since only MD's and DO's are considered doctors and can go into any residency program.) According to AOA statistics, approximately 40% of DO grads choose Family Practice as their primary specialty. There has been an approximately 50% increase in the number of DO grads between 1995 and 2007 with 3,024 graduating last year. This represents about 15.8% of the total number of newly graduated physicians. But it does represent another 1,200 (or about 50%) of the number of new graduate physicians electing to go into Family Practice.

Osteopathic physicians represent one of the fastest growing segments of health care professionals in the US. AOA estimates that by the year 2020, there will be at least 100,000 practicing DO's, and they will represent an ever increasing proportion of the physician pool. The other noticeable trend is that osteopaths tend to be somewhat younger than their allopathic colleagues. In 2008, almost 50% of DO's were younger than 45 while only 39% of MD's were. Conversely, only 10% of DO's were older than 65 while 19% of MD's were. This implies that as we age, our likelihood of having a DO as a physician (especially as a primary care physician) will be fairly high.

To read the entire editorial, please go to www.humboldt1.com/~medsoc/images/bulletins/2009-03%20MARCH%20BULLETIN_for%20web.pdf

Presidential Stress

Lyle B. Stillwater, MD, discusses "The President and His Hippocampus," in *Vital Signs*, the journal of The Fresno-Madera And Kern Counties Medical Societies.

Way back in 1979, I had the misfortune to be the only ENT resident at Stanford for thirteen days and thirteen nights including that many nights were on-call in a row (as a result I still hold the Bill Fee Iron-Man award in that de-partment).

At age 28, I could just tolerate the stress but I did lose 25 pounds in weight over a three week period centered around that time on-call, surviving on canned Ensure, Sudafed, and caffeine.

I was interested to read recently on the anatomical correlates involved in the effects of chronic stress on a normal brain, i.e. the hippocampus over time may decrease significantly in size.

With the recent change in U.S. presidents after eight years of essentially being on-call as the president, available day and night constantly, I started to wonder what effects that constant stress would have on any president's brain.

The president's unique stressors would include the constant need to personally be available every minute of the day constantly for eight solid years, even when on supposed vacations.

Robert Sapolsky at Stanford has shown that a prolonged flood of stress hormones can actually cause shrinking in certain brain areas particularly in the hippocampus. A major role of the hippocampus is in memory. It is not unusual for persons with prolonged stress to report forgetfulness and difficulty learning (certain portions of the hippocampus can recover and the stress response is reversed).

The ultimate brain effects would manifest themselves in depression, anxiety and most importantly dysfunction in decision-making.

A Novel History Ph.D. Thesis Project would be for a Masters student to review all two term presidents to see if in the last year or two of their second term, consistent poor presidential decision making existed, no matter who the president was, compared to earlier in their stint as president.

It would also be interesting for all future presidents to get a baseline brain MRI scan, and then repeat the study eight years later to see if the hippocampus has decreased in size, more than expected from reviewing an age-matched control group.

The entire article is at www.fmms.org/index.php?id=48

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