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## Update on Anesthesia

Selma H. Calmes MD, Retired Anesthesiologist

Many polio patients fear anesthesia. Multiple surgeries in childhood were common for those who had polio and anesthesia care then was not as sophisticated as it is today. Modern anesthesia is much improved since the time of polio epidemics! In this session, an anesthesiologist familiar with modern anesthesia practice and polio will answer recent, common questions asked by post-polio patients. If time, the audience can ask their own questions.

1. "Do I really need to have a colonoscopy? It requires anesthesia, and I'm afraid of that."

Colon cancer is the third most commonly diagnosed cancer and the third leading cause of death from cancer in the US. About 5% of Americans will be diagnosed with colon cancer in their life-time. Colonoscopy (looking at the lower part of the intestine with a flexible telescope, to identify early/possible colon cancer) is currently the most accepted way to identify early colon cancer; it has been well-documented to save lives because early lesions can be identified and removed. Newer tests (virtual colonoscopy, stool DNA mutation tests and immunochemical Fecal Occult Blood Tests (FOBT) have been developed recently, but only virtual colonoscopy has been compared with colonoscopy. It compares favorably, but it is not possible to treat lesions found. If lesions are found, you must still have regular colonoscopy. There may also be problems with insurance payment for virtual colonoscopy.

Colonoscopy is recommended for everyone over age 50 years, earlier if you have a family history of colon cancer or other risk factors. You must have a bowel prep, to remove stool so the endoscopist can see lesions, and anesthesia (sedation) is usually given for patient comfort—bowel inflation with gas, to distend the colon, is needed, and is uncomfortable.

You need to commit to getting screened somehow for colon cancer. Which screening is best depends on you and your MD's experience. Colonoscopy should be done by an experienced Board-Certified gastroenterologist, in a certified out-patient facility. The risk of anesthesia is small compared to the risk of colon-cancer.

2. Why is it so hard to link up ahead of time with the anesthesiologist who will do my case?

Daily anesthesia staffing is a complex equation! It is extremely difficult to know ahead of time who will be doing which case on a particular day. There is a constant flux of anesthesia staff (people get sick), other needed staff such as techs, incoming emergency cases, obstetric anesthesia cases, cases may move from one OR to another for equipment or staffing problems and so on. And,

anesthesia group size is increasing; it is not unusual to have groups of over 100 anesthesiologists.

So, what can you do, given these problems? Two helpful possibilities follow:

- a. If at all possible, try to have your operation at a major university hospital. This gives the best chance of getting quality care (not only anesthesia care). Check its accreditation data on the Joint Commission for the Accreditation of Health Care Organizations web site. Many states also have hospital quality data on the web. Most academic hospitals also have pre-operative clinics in which patients are screened ahead of time. These are extremely helpful in identifying and preparing for difficult patients. They also have an array of expert physicians in many areas. Especially important here is ICU care and MDs capable of handling respiratory failure postoperatively.
- b. Use your surgeon to lead the way to the anesthesia department. Surgeons and anesthesiologists work together daily and often become “teams,” making it easier for them to work together on a difficult patient. When an operation is being planned, explain your post-polio issues (scoliosis, pulmonary failure and a history of iron lung use are red flags here!) and ask that they be noted during scheduling and also if the surgeon could speak with the anesthesia department ahead of time, to warn anesthesia staff you’re coming and what the issues are.

3. What’s new in anesthesia that I need to know?

This is a brief listing. Answers will be expanded as time allows in the session.

- a. Better measurement of quality of care in anesthesia and better recognition of where problems are and how they could be improved.
  - b. Increasingly sophisticated knowledge of ventilation problems and better management of respiratory problems postop.
  - c. Recognition that many patients are left with residual neuromuscular block and the possible complications.
  - d. The desirability of using *both* regional anesthesia and general anesthesia together, for improved outcome.
  - e. Shortages of standard anesthesia medications are happening, due to changes in the pharmaceutical industry. This has caused many problems.
  - f. Does the medical literature document anesthesia problems for post-polio patients? A 2013 review found no unusual problems and that regional anesthesia was not reported to cause worsening of PPS.
4. What are the issues in bariatric (intestinal surgery that can facilitate weight loss) surgery for post-polio patients?

This sounds like a “quick fix” for obesity but is an area full of possible problems. There are no reports of post-polio patients having bariatric surgery.

Possible problems relate to the disease obesity (diabetes, presence of sleep apnea, presence of a fatty liver, the increased difficulty of anesthetizing obese people), where the procedure is done (out-patient facility/in a hospital), the procedure done (lap band or gastric bypass) and who does the operation. Lap band (placing a flexible plastic band with an injection port around the upper stomach and inflating the band as needed) sounds simple and quick, but the bands can have complications and may need to be removed.

Best results come from dedicated teams, including a dietitian, at academic medical centers. Long-term follow-up is essential!