



Oxygen: Too Much of a Good Thing?

Dr. Richard L. Bruno HD, PhD
Director, International Centre for Polio Education
www.postpolioinfo.com

E.R. nurse says, "We will just give you a little bit of oxygen'."

"No 'we' will not!" is the knowledgeable polio survivor's answer unless MEASURED blood oxygen is below 95.

Oxygen is like aspirin your mother used to give you. Don't feel well? Take an aspirin. Don't feel well? "We'll give you a little bit of oxygen."

As with any other drug, there needs to be a REASON for the prescription of oxygen (O₂), because O₂ DEPRESSES polio survivors' damaged breathing control center in the brain stem. Also, a weak diaphragm causes some polio survivors to retain carbon dioxide (CO₂) which is toxic. If there are medical or surgical issues that cause MEASURED blood oxygen to drop to the low 90s, then both giving O₂ and TREATING the cause could be lifesaving.

But, without a respiratory or other disease causing O₂ to be in the low -- for example for coming out of surgery or using CPAP or Bi-Pap -- polio survivors should not just be given "little bit of oxygen" for no reason. If you just have apnea or shallow breathing during sleep, CPAP or Bi-Pap should bring your O₂ into the normal range without need for extra O₂.

CO₂: THE GAS POLIO SURVIVORS HAVE TROUBLE GETTING RID OF.

Polio survivors retaining carbon dioxide is not discussed enough. I got a call from an anesthesiologist in North Carolina about a polio survivor who'd had her gall bladder removed and in the recovery room was "fighting the tube" placed in her windpipe during the surgery. Well, nearly every post-op patient "fights the tube." But, the nurses thought she was having trouble breathing, even though her measured O₂ was 96%, so they turned up the O₂. Turns out that the patient's trouble was retaining CO₂; the extra O₂ depressed her breathing, she went into respiratory arrest and died. The anesthesiologist almost cried when I explained this to him.

"Why don't we know about this!?" he asked.

I thought "If only North Carolina had the Internet where a doctor could search "surgery, breathing + Polio survivors" and find the Post-Polio Library and 'Preventing complications in polio survivors undergoing surgery'.

Yes, yet again, polio survivors must always have a discussion with the anesthesiologist before any test (e.g., a colonoscopy) or surgery using anesthesia. They need to understand that polio survivors can retain CO₂ and the dangers of O₂ suppressing breathing.