

## **Research Assessment #16**

**Date:** February 25th, 2021

**Subject:** Anesthesia Safety

**MLA:**

“Anesthesia Advances to One of the Safest Modalities in Medicine.” Ageo, 16 Jan.

2015, [www.abeo.com/anesthesia-advances-to-one-of-the-safest-modalities-in-medicine/](http://www.abeo.com/anesthesia-advances-to-one-of-the-safest-modalities-in-medicine/). Accessed 26 Feb. 2021.

**Assessment:**

Over the past few weeks, I have been researching different general anesthetics, the most recent one being Etomidate Injection. However, this week I wanted to focus on learning more about the improvements doctors make when increasing the safety and effectiveness of anesthesia. Thus, I read and annotated an article on this topic that I found on a medical website.

The first significant thing I found in this article is the discussion on how much safer anesthesia has become. It was said that in “1990 deaths related to anesthesia occurred in two patients per 10,000 procedures” which is vastly different from today’s “one anesthesia-related death per 200,000 to 300,000 procedures”(Anesthesia 1). That means that only roughly between 0.0005% and 0.0003% of patients who go under anesthesia for any kind of procedure or surgery die because of an anesthetic-related issue. This has widened my perspective and made me realize that anesthesia is much safer than I originally had presumed. In fact, this article pointed out that “experts say that anesthesia is one of the safest areas of health care today”(Anesthesia 1). This is actually really motivating to me now that I know how much safer anesthesia has

become over the years. Although anesthesia may cause some negative after-effects, which is another story different from causing death, I have decided to focus more on comparing anesthetics rather than learning about how to improve them. Rather, I now believe it would be more beneficial for my learning and understanding to expand my knowledge on current common anesthetics, as well as older and recently developed ones. This changes my final product idea because I will now focus solely on comparing different anesthesia medications, but the main idea of learning more about different anesthetics is still the same.

The next thing I found interesting from this article is how it mentioned specific improvements that helped make anesthesia as safe as it is today. The article spoke about how “one of the many reasons for improved safety during anesthesia is the use of sophisticated monitoring equipment that warns the anesthesiologist when things are not right”(Anesthesia 2). I never really focused too much on the monitoring system that anesthesiologists use. I actually briefly looked into monitoring systems at the beginning of the year when I was first being introduced to anesthesiology and was reading up on a variety of topics. Now that I know this, I think looking deeper into researching more about monitoring systems and how anesthesiologists use them during operations would be really interesting and helpful. Moreover, a specific function of the monitoring system is that it makes an “audible alarm” to warn anesthesiologists that something is going from(Anesthesia 2). Now that I think back, I do remember hearing a beeping sound in movies or shows about doctors. However, I never realized before that these sounds were coming from a machine monitored by anesthesiologists. This made me realize how important in-person shadowing is, since all of these things I would have learned if I

saw a procedure in person. However, there are still video clips online that I can watch and learn from. Moreover, learning about the monitoring system and how it particularly functions, I am more curious now to know if there are multiple monitoring systems or if there is just one universal standard monitoring system. Furthermore, are doctors and or researchers looking into how to improve current monitoring systems? More than improvements, I am interested in learning more about how monitoring systems work since they are what anesthesiologists use during procedures.

All in all, this article was very informative and helpful for my understanding of how the safety of anesthesia has been improved over time. This assessment has also helped me realize that I have been single-minded with focusing on how to improve the things I am learning about, rather than simply focusing on learning more about anesthesia. During the next couple of days, I plan on grouping together all that I have learned and focusing my attention on comparing anesthetics with the extra information on some ways they were improved rather than focusing on the improvements.