

Isabella Rosa Nanini

Mr. Speice

Independent Study and Mentorship II- 3B

13 February 2018

Assessment 18

Type of Observation: Observed an AVSD (atrioventricular septal defect) repair and mitral valve repair

Mentor: Dr. Timothy Pirolli

Location: Children's Health Medical Center- Dallas 1935 Medical District Drive Dallas, Texas 75235

Date: Tuesday, February 13 2018

Time: 8:00am to 3:00pm

Assessment:

In this observation I had the opportunity to observe an atrioventricular septal defect (AVSD) repair and a mitral valve repair on a four-year-old child. Before coming into this observation I had a limited understanding of what an AVSD was, so I researched this congenital heart defect like I have done before observing any case. An AVSD is a heart defect in which there are holes between the chambers of the right and left sides of the heart, and the valves that control the flow of blood between these chambers may not be formed correctly. AVSDs affect 1 in 2,120 babies, making it a relatively common congenital heart defect. The repair involves reconstructing the chambers of the right and left sides of the heart, and reconstructing any anomalies within the valves. In this case the mitral valve needed to be repaired to reduce mitral

valve regurgitations, backflow of blood. This case was different from any case I have watched before because the outcome of the mitral valve repair was not optimal. After repairing the mitral valve, the mitral valve regurgitation appeared to be worse than before and Dr. Pirolli and Dr. Davies had to operate once again. Only the patient was still left with some regurgitation and will most likely need reoperation later in life to fully repair the mitral valve. Dr. Pirolli showed me that pediatric cardiothoracic surgery cannot always be perfect, because of this patient's maldeveloped mitral valve, the mitral valve will never behave perfectly.

This observation, although unrelated to my final product since this mitral valve repair was not isolated and included an AVSD repair, led to a very successful and productive mentor visit with Dr. Pirolli. This mentor visit centered around my final product, a prospective research on mitral valvuloplasty and mitral valve replacements in infants less than one year old. I had just recently completed the rough draft of my final product proposal and calendar and we sat down and reviewed what I had written. We reviewed the general level 1 outline I had written in my calendar and we answered some big picture questions from our research, like its purpose, and the big questions we are attempting to answer. The goal with our research is to simply prove that mitral valvuloplasty and mitral valve replacement in infants less than one year old although high-risk can be successful through the review of the past cases at Children's Health Medical Center Dallas that meet the criteria. Dr. Pirolli also allowed me to sit in a meeting with cardiologist Dr. Adrian Dyer. In this meeting we reviewed the need for the specialist review of the echoes of each patient in our research. Dr. Dyer suggested that I schedule an interview with her to review these echoes with her. In this meeting I was able to learn of the team effort required

to complete a medical research paper and the specific job each professional takes to ensure the completion of this medical paper.

Overall I feel as if I am finally on the same page as my mentor when it comes to my final product, and I am ready to begin the hard work that will take to complete this paper. I am excited to learn more about medical research the effort it takes to be a medical professional through this research and to leave my own small impact in the world of pediatric cardiothoracic surgery.