Annotated Bibliography

Alberga, A. J., Karthaus, E. G., Wilschut, J. A., Bruin, J. L., Akkersdijk, G. P., Geelkerken, R. H., …Verhagen, H. J. M. (2022). Treatment outcome trends for non-ruptured abdominal aortic aneurysms: A nationwide prospective cohort study. *European Journal of Vascular and Endovascular Surgery*, *63*(2), 275-283. doi.org/10.1016/j.ejvs.2021.08.019

The article presents a study on the difference between patients with non-ruptured abdominal aortic aneurysms who either underwent standard endovascular surgery or open surgical repair. The article's authors conducted a study from 2014 to 2019 to see the outcomes of either endovascular surgery or open surgical repair. The study was conducted on patients with intact abdominal aortic aneurysm surgical repair in the Netherlands. The article consists of in-depth explanations of each type of surgery and the complications of each of them.

This article is helpful as it provides statistical data from the Dutch Surgical Aneurysm Audit regarding patients in the study and the number of procedures performed. On top of the statistical data, charts include information on patients with major pre-operative complications, patient demographics, and other essential data acquired from the study. This article's primary weakness is that there is little to not as much information on any imaging procedures performed on the patients, specifically computed tomography procedures.

Anagnostakos, J., & Lal, B. K. (2021). Abdominal aortic aneurysms. *Progress in Cardiovascular Diseases, 65*, 34-43. doi.org/10.1016/j.pcad.2021.03.009

This article presents information regarding abdominal aortic aneurysms and the process of treatment. Information regarding screening for abdominal aortic aneurysms is included within the article, which is based on the guidelines from the United States Preventative Taskforce, which helps understand the steps taken within the initial pre-operative process. The article's authors divided the information into categories, including risk factors, clinical presentation and diagnosis, and other helpful categories. Additionally, a category in the article on endovascular aortic aneurysm repairs was included. This category contains information on these types of surgeries, photographs, and diagrams of how the surgery is performed.

This article is helpful as there is a category that explicitly talks about the various forms of imaging procedures. The authors provide information on computed tomography angiograms and why these types of scans would be performed over other modalities. Additionally, the information on computed tomography angiograms contains positives and negatives to these examinations.

Geisinger Community Medical Center. (2022). *Patient CT Report* [Report]. Retrieved from Geisinger Community Medical Center.

This source of information is a rarer case study found at Geisinger Community Medical Center. The patient in the case study meets the stereotypical requirements when assessing and diagnosing abdominal aortic aneurysms. The positives of the case study are that there is an in-depth report about the patient’s history and symptoms and a thorough explanation of the patient’s anatomy. Additionally, images were provided from the report with explanations and diaphragms to show exact measurements of the aneurysm and how it affected the surrounding abdominal organs.

The major negative to this case study is that the patient did pass away, so there is not much information beyond when the CT scan was obtained. The information beyond the CT scan could have provided extra resources on the type of surgery and the patient’s health outcome. Also, more images could have been supplied from the surgery using fluoroscopy. However, based on the patient’s aneurysm size, there was a shallow survival rate, and the aneurysm ruptured.

Johns Hopkins Medicine. (2022). Abdominal aortic aneurysm.Retrieved from https://www.hopkinsmedicine.org/health/conditions-and-diseases/abdominal-aortic-aneurysm

This source of information presents current information on what abdominal aortic aneurysms are. The website provides categories with titles based on common questions that arise when learning about abdominal aortic aneurysms. Since John Hopkins Medicine is a well-known medical organization, this source of information is designed to educate those such as patients. Categories are listed as questions to cover specific topics of causes, symptoms, types of medical imaging, and others. Additionally, some topics include diagrams and pictures for further clarification and explanation.

This source is helpful because it covers areas of information crucial to knowing about abdominal aortic aneurysms. John Hopkins Medicine includes information that explains the types of shapes these aneurysms can form and another type of surgery that can be performed. Also, the information goes in-depth on what computed tomography is and how it plays a role in diagnosing abdominal aortic aneurysms. The main weakness of this source is that it is more patient oriented. However, the information on the source is still vital regarding abdominal aortic aneurysms.

Karsy, M., Abou-Al-Shaar, H., & Guan, J. (2020). *The surgical handbook*. New York, NY: Thieme Medical Publishers.

This textbook presents updated information on aneurysms, including abdominal aortic aneurysms. The textbook's authors based each chapter on the different types of surgeries performed in the medical field. The chapter on vascular surgeries provides information on abdominal aortic aneurysms, including the primary medical imaging modalities used in the diagnosis process, statistical data on the size of an aneurysm compared to the risk for rupture, and treatment options for both ruptured and non-ruptured aneurysms. The chapter within the textbook provides crucial medical terminology that is used to assess and describe aneurysms.

The textbook is a valuable source for obtaining specific information on computed tomography concerning abdominal aortic aneurysms. In the chapter on vascular surgery, information is provided on surgical planning and goes into detail on the type of anatomy of interest that is often visualized with computed tomography. Data regarding patient dynamics, possible causes of aneurysms, and explanations of the types of surgeries are incorporated into the textbook.

Mayo Clinic. (2022). Abdominal aortic aneurysm. Retrieved from https://www.mayoclinic.org/diseases-conditions/abdominal-aortic-aneurysm/diagnosis-treatment/drc-20350693?p=1

The Mayo Clinic is one of the most reputable medical corporations known for its extensive research in cardiology and information about abdominal aortic aneurysms. The information is divided into multiple sections. These include diagnosis, screening, treatment, lifestyle/home remedies, etc. The information presented on the website discusses how computed tomography (CT) is used in the diagnosis process. Additionally, the information regarding CT goes in-depth on what the scanner looks like, contrast media administration, and other information on CT.

This is a helpful source as it is broken down from diagnosis to treatment. The treatment section contains information regarding medical monitoring and surgical procedures. The primary weakness that this website presents is that it seems to be more patient oriented. Some areas of the website contain information about setting up an appointment or what to expect from their doctor regarding abdominal aortic aneurysms. However, this information is at the bottom of the website and does not distract from the anatomical data needed.

Radiological Society of North Americans, Inc. (2022). CT angiography (CTA). Retrieved from https://www.radiologyinfo.org/en/info/angioct

This website provides information on computed tomography angiography (CTA). The website contains information as the headers are common questions one may ask when learning about CTAs. The information presented includes how the procedure is done, contraindications, benefits vs. risks, etc. Also, the website contains a video to provide a visual explanation of what is to occur for a CTA. However, this video seems more targeted at patients who may have to get a CTA done.

This is a helpful source for understanding the fundamentals of a CTA, especially when it comes to contrast administration, test duration, and anatomy is interest. The main weakness of the source is that there is just a brief section on aneurysms, and it does not go as in-depth compared to other sources. Additionally, the section on aneurysms does not include specific information on abdominal aortic aneurysms. However, there is some information regarding what an aneurysm is and how one can occur.