

Mar 31st, 10:30 AM - 12:30 PM

UH-03 A Case Report of Saint's Triad and the Diagnostic Implications for Clinicians

Catalina S. Molina
Anderson University - South Carolina

Nnenna Igwe
Anderson University - South Carolina

Hannah Young
Anderson University - South Carolina

Follow this and additional works at: <https://scholarcommons.sc.edu/scurs>



Part of the [Anatomy Commons](#)

Molina, Catalina S.; Igwe, Nnenna; and Young, Hannah, "UH-03 A Case Report of Saint's Triad and the Diagnostic Implications for Clinicians" (2023). *SC Upstate Research Symposium*. 46.
<https://scholarcommons.sc.edu/scurs/2023symposium/2023posterpresentations/46>

This Poster is brought to you by the The Office of Sponsored Awards and Research Support at Scholar Commons. It has been accepted for inclusion in SC Upstate Research Symposium by an authorized administrator of Scholar Commons. For more information, please contact digres@mailbox.sc.edu.

A Case Report of Saint's Triad and the Diagnostic Implications for Clinicians

Catalina Molina, Hannah Young and Dr. Nnenna Igwe
College of Health Professions, Anderson University

Introduction

In the Anderson University Cadaver Lab, it was found that a 78-year-old, male cadaver presented pathologies related to the medical condition called Saint's Triad. This condition occurs when a patient presents with a hiatal hernia, diverticulosis of the colon, and gallbladder disease. Other research suggests the role Abdominal Aortic Aneurysms (AAA) has in relation to Saint's Triad ¹.

The Saint's Triad provides numerous implications in research and diagnostic medicine. The Saint's Triad points to competing arguments in medicine known as the Ockham's razor and Hickman's dictum ².

Ultimately, this medical condition encourages medical professionals to have a holistic view for better patient outcome.

Methods

Cadavers

Cadavers used for this study consisted of two male human cadavers 79.5 (± 1.5) years. Cadavers were donated to the Anderson University Cadaver Lab through the Gift of Body Program. Cadavers were dissected in similar manners where their face remained covered.

Instruments

Basic surgical tools were used in the process of dissection. Tools included scalpels, tenotomy scissors, and forceps. Additionally, a tape measure and camera were used.

Dissection Procedure

To gain access into the abdomen, a midsagittal incision was made through the interior abdominal wall. Multiple transverse incisions were made through the skin of the anterior body wall. Cadavers were dissected downwards reflecting skin and muscles with the underlying connective tissue removed. Once access to underlying structures was gained, researchers cut through the ribs and clavicle in the coronal plane. To gain access to the retroperitoneum, the intestines were reflected. Incisions were made through the parietal peritoneum to expose the blood vessels of the posterior abdominal wall. This was done to gain access to the aorta.

Findings

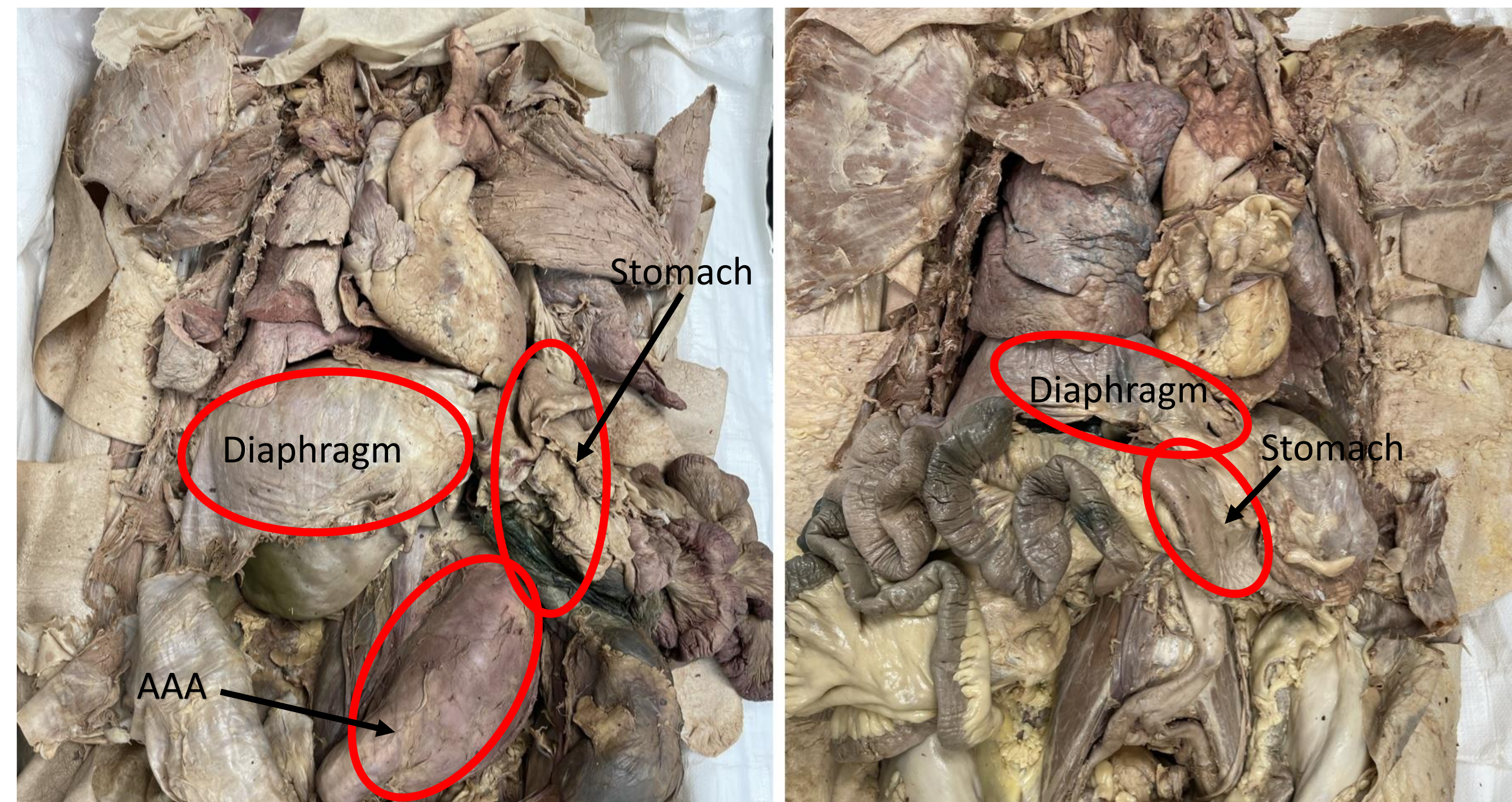


Figure 1. Shows the trunk of both Cadaver #1 and Cadaver #2. Left shows Cadaver #1 with hiatal hernia. Note that the stomach protrudes through the diaphragm. Right shows Cadaver #2 with no hiatal hernia. Stomach does not bulge through the diaphragm and thoracic cavity appears standard.

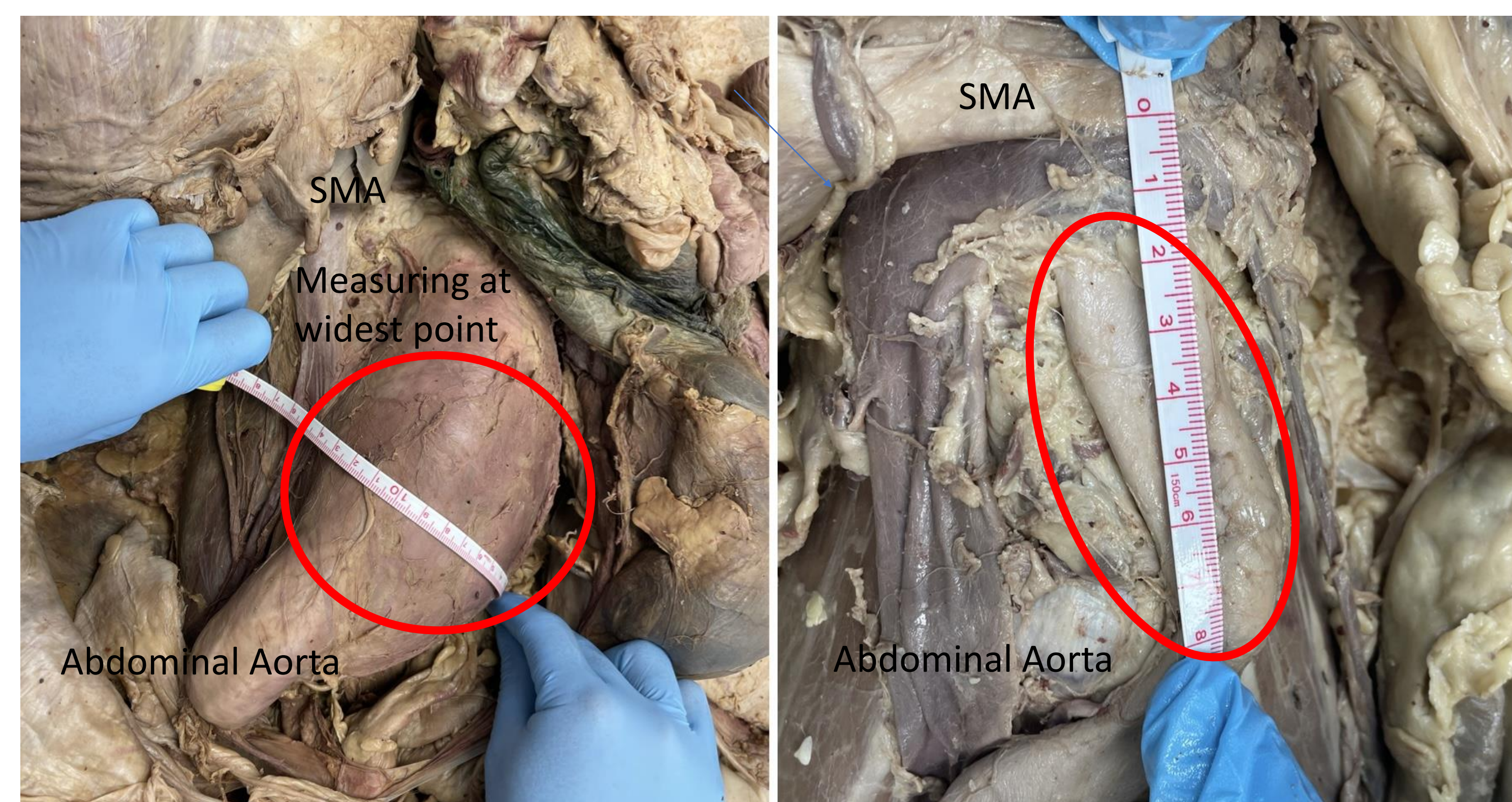


Figure 2. Both sides showing comparison of Abdominal Aorta. Left side shows Cadaver #1 in which an unruptured AAA was found. Right side shows Cadaver #2 in which Abdominal Aorta is not inflamed or ruptured. Measurements of both Abdominal Aortas were taken using the SMA as landmark.

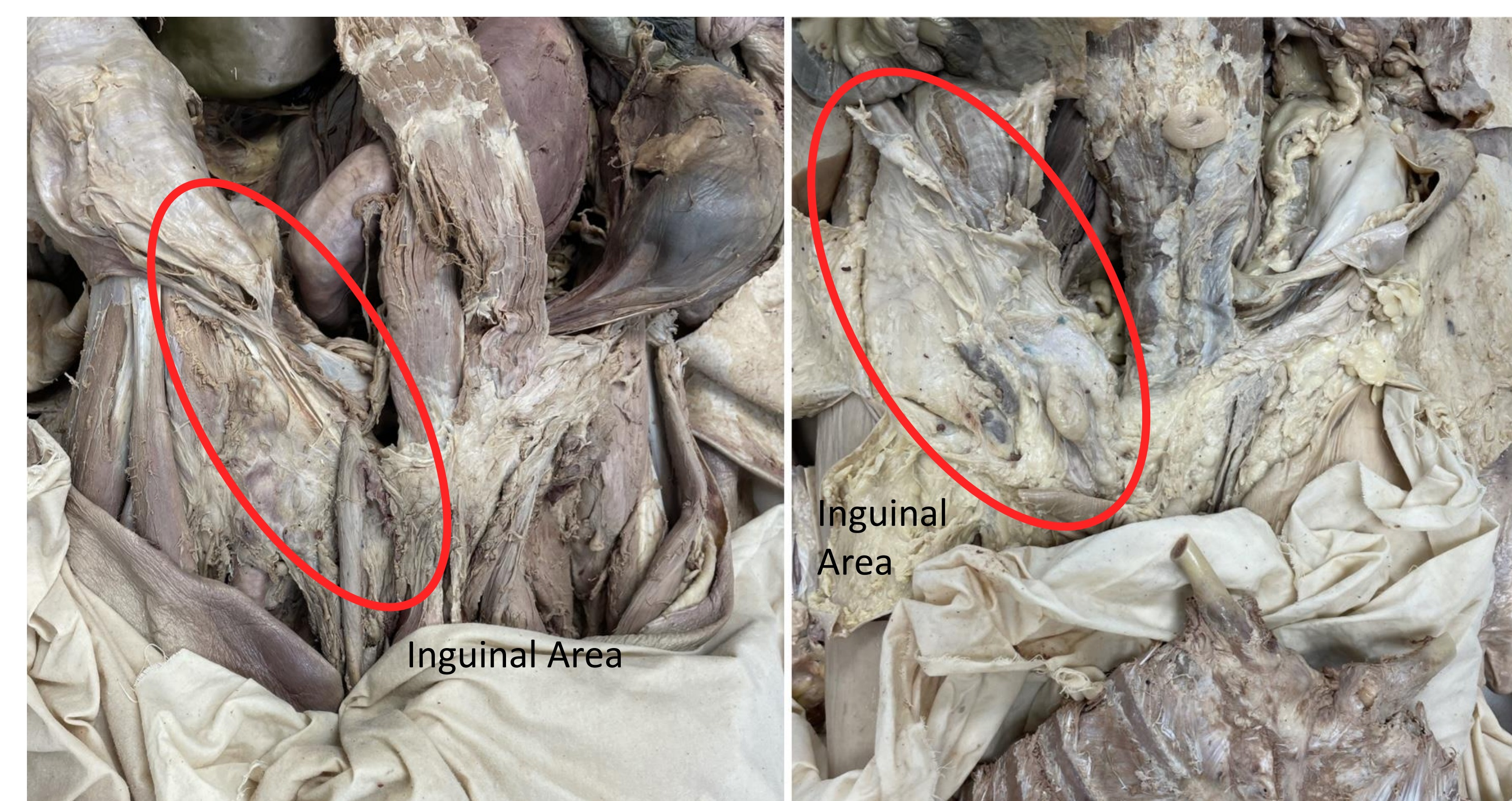


Figure 3. Both sides showing comparison of the Inguinal Triangle. Left side shows the Inguinal region from Cadaver #1 in which there was no hernia found. The right side shows the Inguinal Triangle on Cadaver #2. As anticipated, there was no herniation and was on par as this cadaver did not show pathologies related to the Saint's Triad.

Discussion

It was believed that a male human cadaver had the medical condition known as Saint's Triad since certain pathologies related to this condition were discovered. The purpose of this case report was to investigate this triad and create awareness on its pathophysiology.³

This research would also enhance the primary care clinicians' index of suspicion about Saint's Triad. In their study, Hauer-Jansen et.al, found

that the connective tissue disease, Herniosis, might play a role in

Saint's Triad.⁴ Despite the limitations that can be expected in case

reports, the findings from this research align with their claim.

More research could be done to evaluate the effect of connective tissue elasticity on the size of large, prominent blood vessels. The aim

would be to investigate the link between connective tissue

diseases, patients with large abdominal aortic aneurysms and the

Saint's Triad.

Selected References

1. Müller V, Miszczuk M, Althoff CE, et al. Comorbidities associated with large abdominal aortic aneurysms. AORTA. <https://www.thieme-connect.com/products/ejournals/html/10.1055/s-0039-1692456>. Published December 5, 2019. Accessed June 16, 2022.
2. Simić AP, Skrobić OM, Djurić-Stefanović A, Stojakov D, Peško PM. From Ockham's Razor to Hickam's dictum and back—saint's theory and the insights in herniosis. *European Surgery*. 2015;47(1):9-14. doi:10.1007/s10353-014-0292-6
3. Dos Santos VM, Dos Santos LA. Comments on Saint's triad. *Surg Case Rep*. 2015;1(1):115. doi:10.1186/s40792-015-0116-3
4. Hauer-Jensen M, Bursac Z, Read RC. Is herniosis the single etiology of Saint's Triad? *Hernia*. 2008;13(1):29-34. doi:10.1007/s10029-008-0421-x