



Thomas Jefferson University
Jefferson Digital Commons

Phase 1

Class of 2022

1-2020

Outcomes and Indications for Thoracofemoral Bypass in the Endovascular Age: A case series and Literature Review

Andrea McSweeney

Thomas Jefferson University, andrea.mcsweeney@jefferson.edu

Babak Abai, MD

Thomas Jefferson University, babak.abai@jefferson.edu

Follow this and additional works at: https://jdc.jefferson.edu/si_ctr_2022_phase1

 Part of the [Translational Medical Research Commons](#)

[Let us know how access to this document benefits you](#)

Recommended Citation

McSweeney, Andrea and Abai, MD, Babak, "Outcomes and Indications for Thoracofemoral Bypass in the Endovascular Age: A case series and Literature Review" (2020). *Phase 1*. Paper 35.

https://jdc.jefferson.edu/si_ctr_2022_phase1/35

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's [Center for Teaching and Learning \(CTL\)](#). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in Phase 1 by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: JeffersonDigitalCommons@jefferson.edu.

Outcomes and Indications for Thoracofemoral Bypass in the Endovascular Age: A case series and Literature Review

Andrea McSweeney, Babak Abai, MD*

Introduction: Endovascular revascularization is commonplace in vascular surgery; however, thoracofemoral bypass (TFB) is optimal in particular patients. Little research focuses on TFB outcomes. This case series and literature review investigated indications, efficacy, and safety of TFB.

Methods: Cases at Thomas Jefferson University Hospital (TJUH) included one male and four females (average age 57.2) from 2015-2019. Literature review yielded 124 cases from other institutions. PubMed and Scopus search using the term “thoraco femoral bypass” yielded 39 articles. Articles published before 2000 and case studies published in any year were excluded. Seven articles were selected. Primary outcomes included 30-day mortality and graft patency; secondary outcomes included complications and indications. Data was tabulated in tables and percentages were calculated.

Results: One hundred and twenty-nine cases of TFB were identified. Some indications included revascularization of failed aortobifemoral bypass (31.8% of patients) and circumferential aortic calcification with or without concomitant infrarenal or mesenteric calcification (20.1%). Thirty-day mortality for all cases was 4.7%. Thirty-day mortality for TJUH patients was 0%. Graft patency for TJUH patients was 100% at six months. At publication, three of five patients had been revascularized for over one year and had patent grafts at one year. Some complications

included pulmonary (12.5% of patients), major vascular reintervention (7.8% of patients) and incision site infection (4.1% of patients).

Discussion: In recent years, few institutions have reported TFB outcomes. High graft patency and low 30-day mortality at TJUH and other institutions emphasize the safety and efficacy of TFB.