

Relative Outcomes of Flap-Based Reconstruction and Incisional Negative-Pressure Wound Therapy for Groin Coverage in the Setting of Vascular Intervention

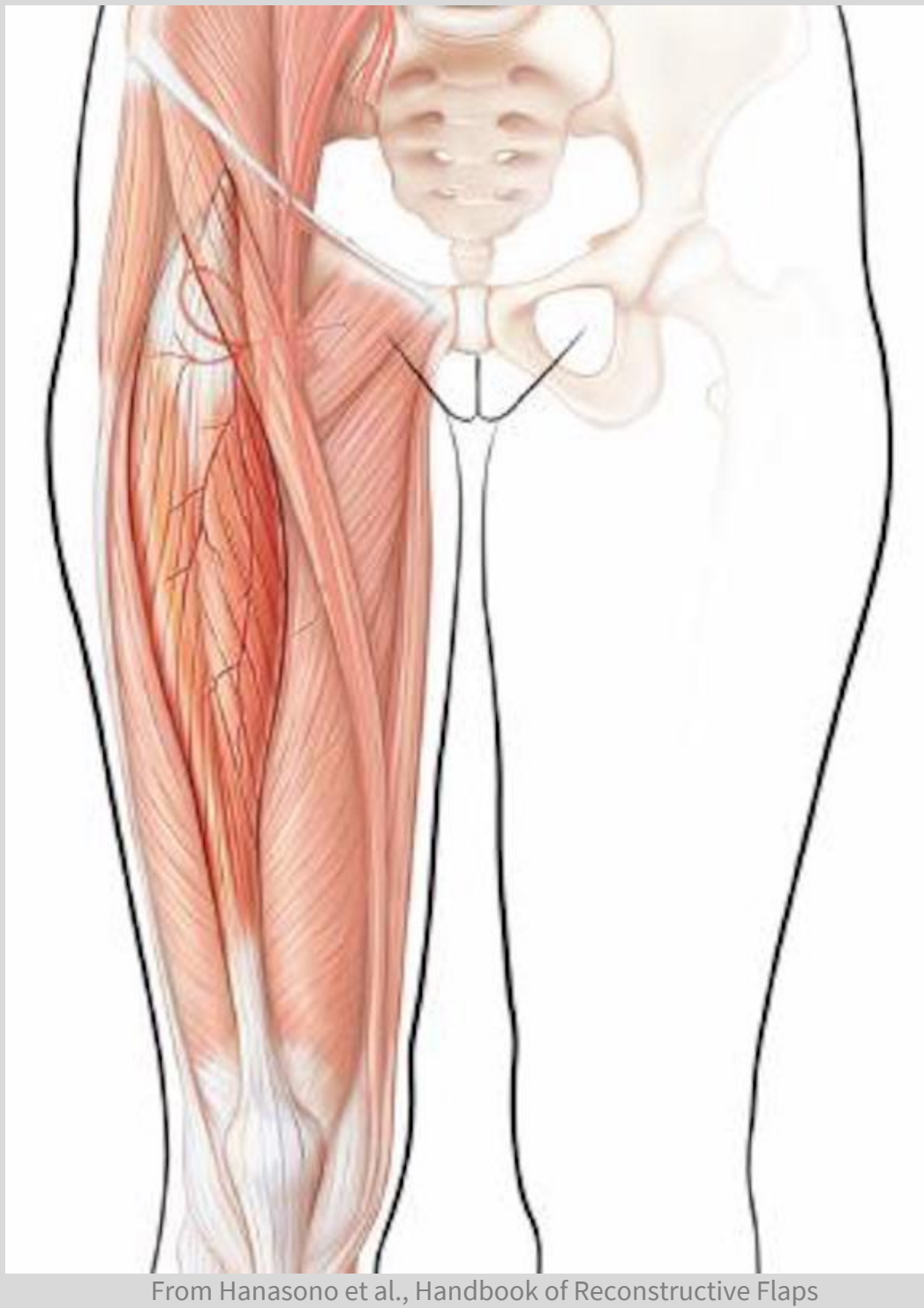
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Biomedical Research

Background

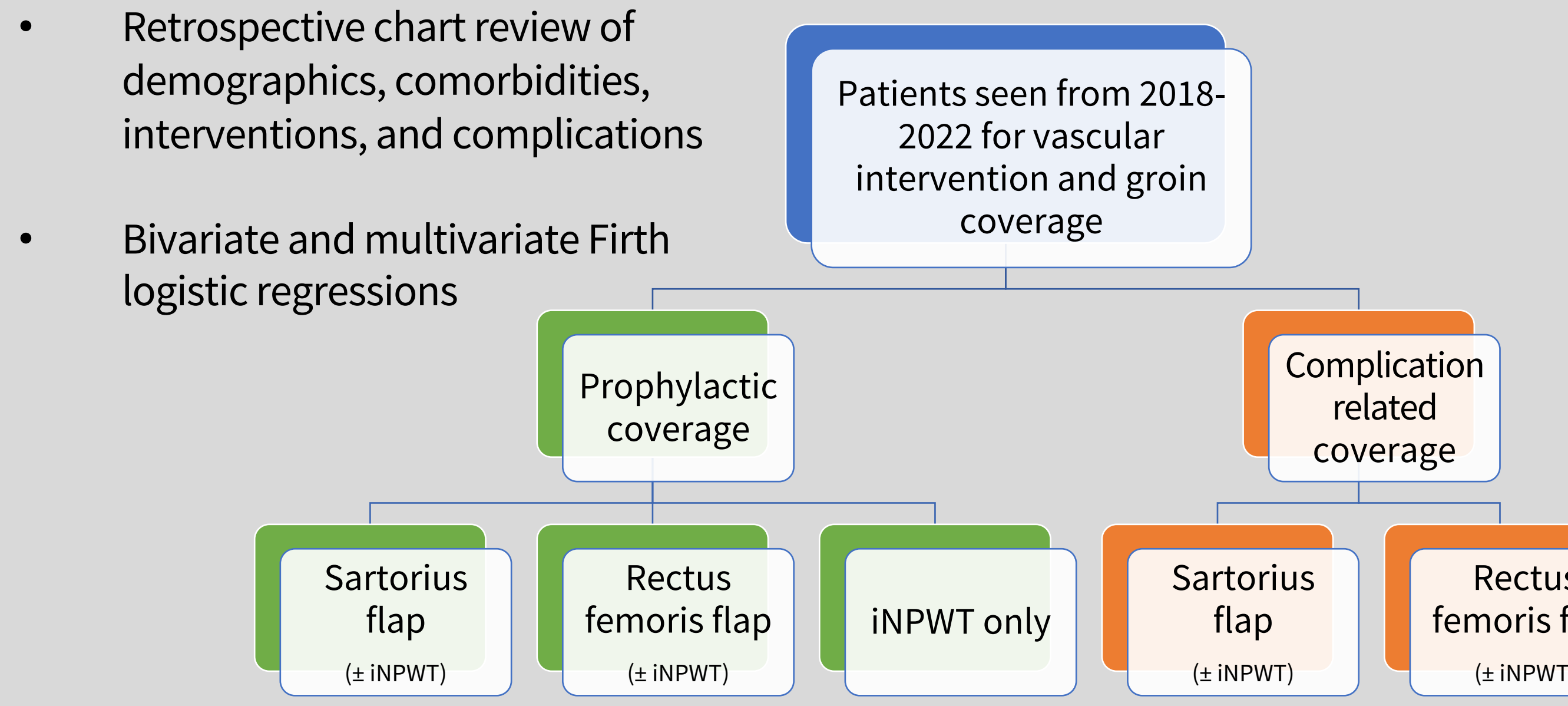
- Vascular operations in the groin face high rates of wound complications that threaten both the underlying vascular reconstruction and limb
- Pedicled rectus femoris or sartorius muscle flaps and incisional negative-pressure wound therapy (iNPWT) can be used for groin coverage either prophylactically, or to manage complications such as groin infection.
- Prior work has not studied the relative use of these flaps in prophylactic contexts, and has not examined the benefit of iNPWT alone



Aims

- To compare outcomes of sartorius muscle flap, rectus femoris muscle flap, and iNPWT alone for prophylactic groin coverage following vascular surgery
- To examine relative outcomes of rectus femoris versus sartorius muscle flap when indicated for groin complications

Methods



Results



Conclusions

- Prophylactic
- Rectus femoris flap use is associated with significantly lower infection risk compared to iNPWT alone
 - Sartorius flap use also trended toward lower infection risk compared to iNPWT alone, though this did not reach significance
 - Protection of vascular procedure is comparable between coverage options

- Groin Complications:
- Rectus femoris flaps may be associated with elevated rates of incisional breakdown compared to sartorius flaps
 - Comparable vascular salvage rates between flap options

Future Directions

- Prospective study in larger sample to understand risk factors for infection and wound breakdown and inform flap/iNPWT choice
- Investigate outcomes of these coverage options in other groin surgical contexts including oncologic reconstruction

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Acknowledgements

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