

Do Ultrasound Characteristics of Superficial Vein Thrombosis Predict Progression?

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Disclosure

Speaker name:

..Douglas Wooster.....

I have the following potential conflicts of interest to report:

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

- I do not have any potential conflict of interest

Background

SVT is a Venous Thromboembolism equivalent.

SVT progresses to DVT in 20 – 48% of patients.

Scoring systems developed to estimate risk of DVT.

Background

Clinical risk factor predictors include malignancy, coagulation abnormality.

Progression if near junctions or > 5 cm in length.

Manage with a repeat ultrasound or full anticoagulation depending on risk of progression.

Direct cost, inconvenience, social capital.

Background

Venous duplex ultrasound can characterize SVT.

Characteristics

- Distribution

- Location

- Combined pathology

- Length

- Thrombus itself

Objectives

Identify characteristics of SVT by VDU.

Correlate initial test findings with findings in surveillance.

Identify characteristics that predict progression.

Methods

Consecutive patients with SVT on an initial VDU entered in a prospective fashion in EMR / PACS.

Comprehensive VDU included deep and superficial veins (truncal and varicosities) from CIV to ankle.

SVT identified by visualized thrombus, incompressible / partially compressible veins, flow patterns.

Methods

Consecutive patients with SVT on an initial VDU entered

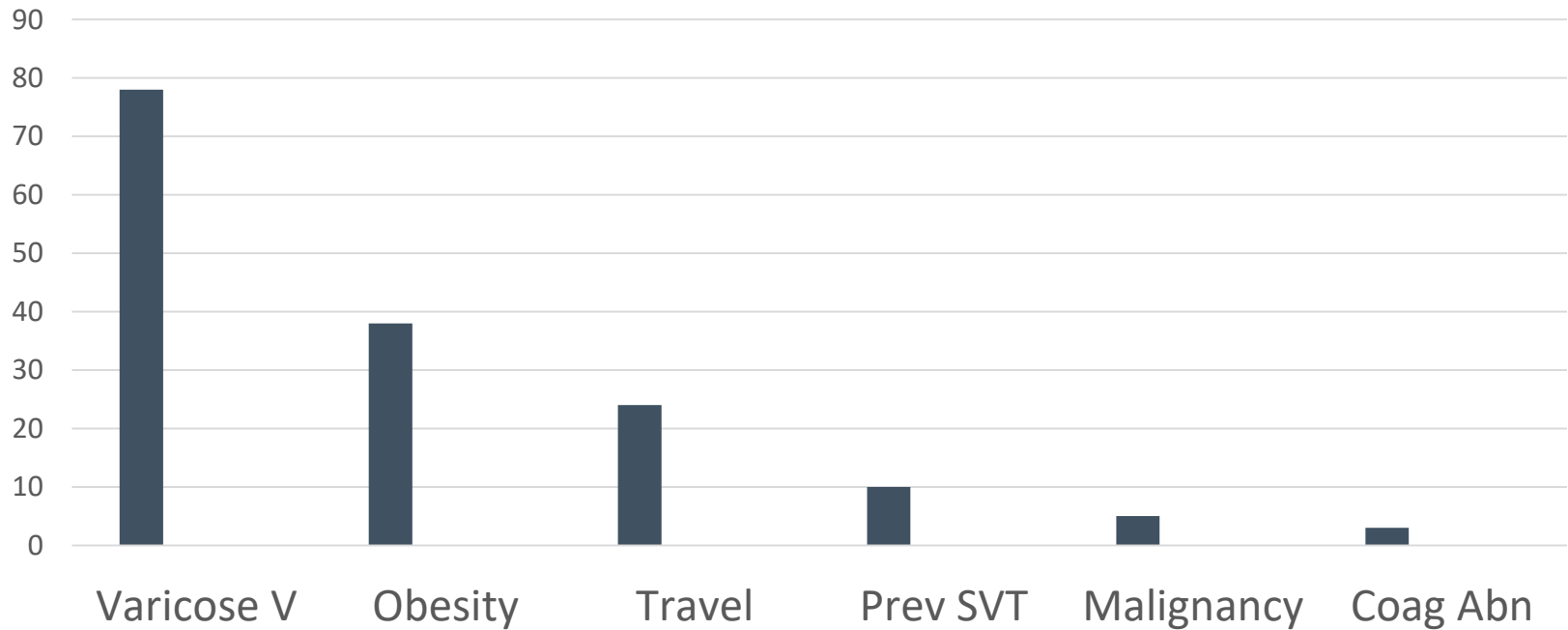
All patients had surveillance at 2-3 weeks and 3 months.

Excluded patients on anticoagulant, with documented DVT or did not complete study.

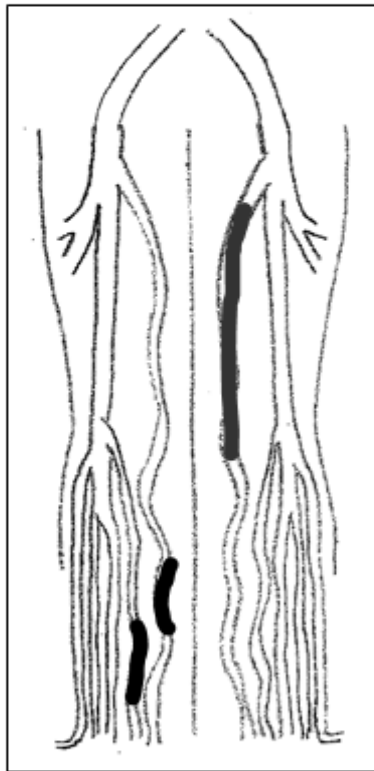
Detailed clinical assessment done.

As a QI project, expedited REB approval was obtained.

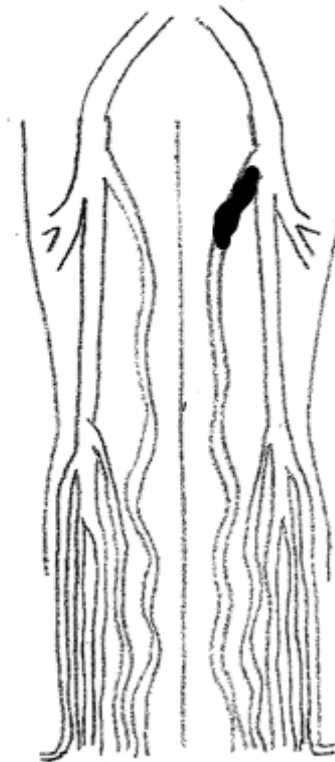
Results: Risk Factors % N = 250



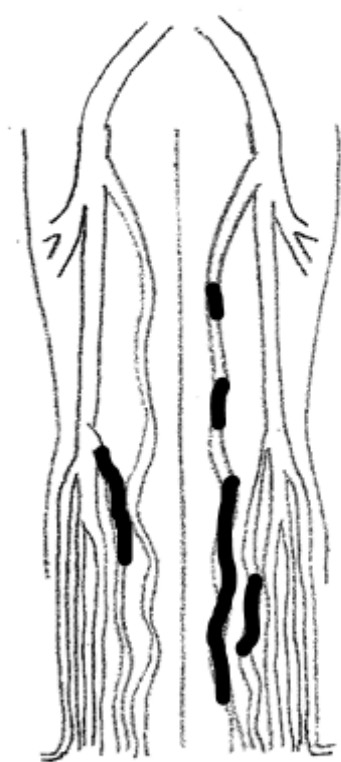
Characteristics of SVT



Location / Length

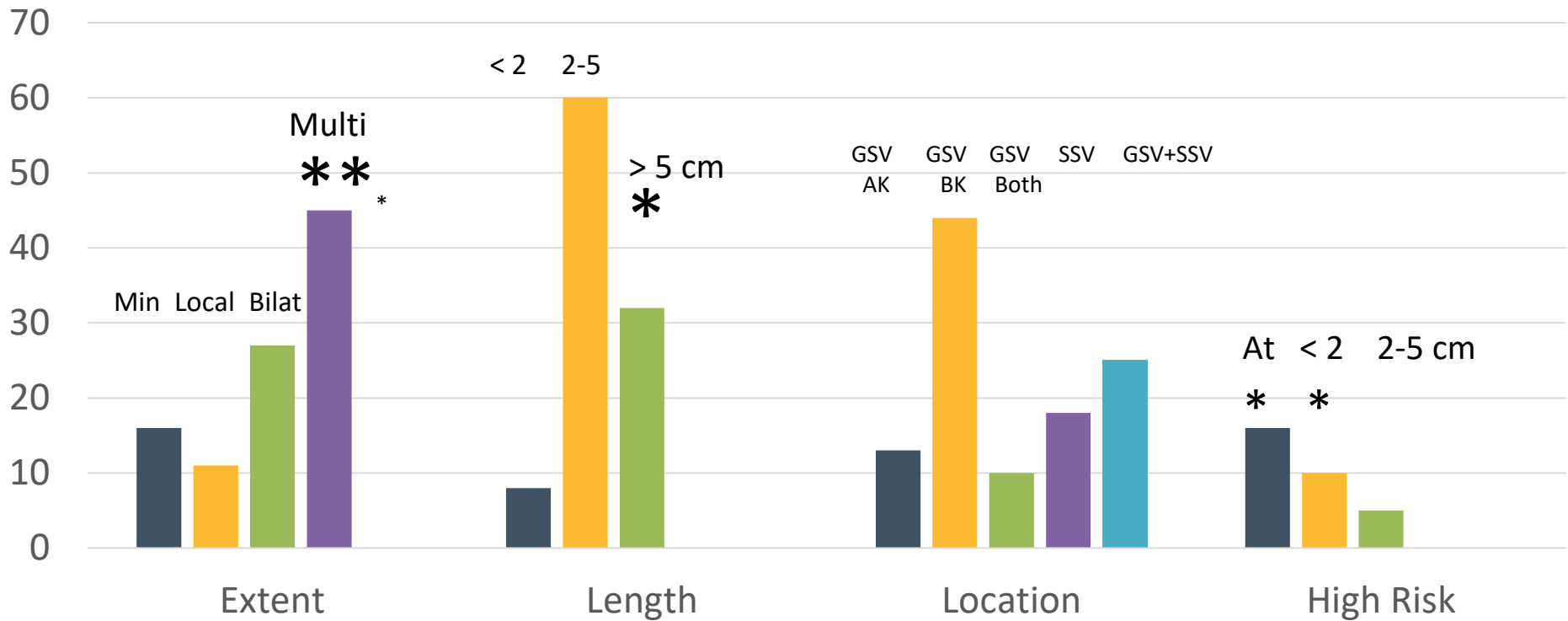


High Risk

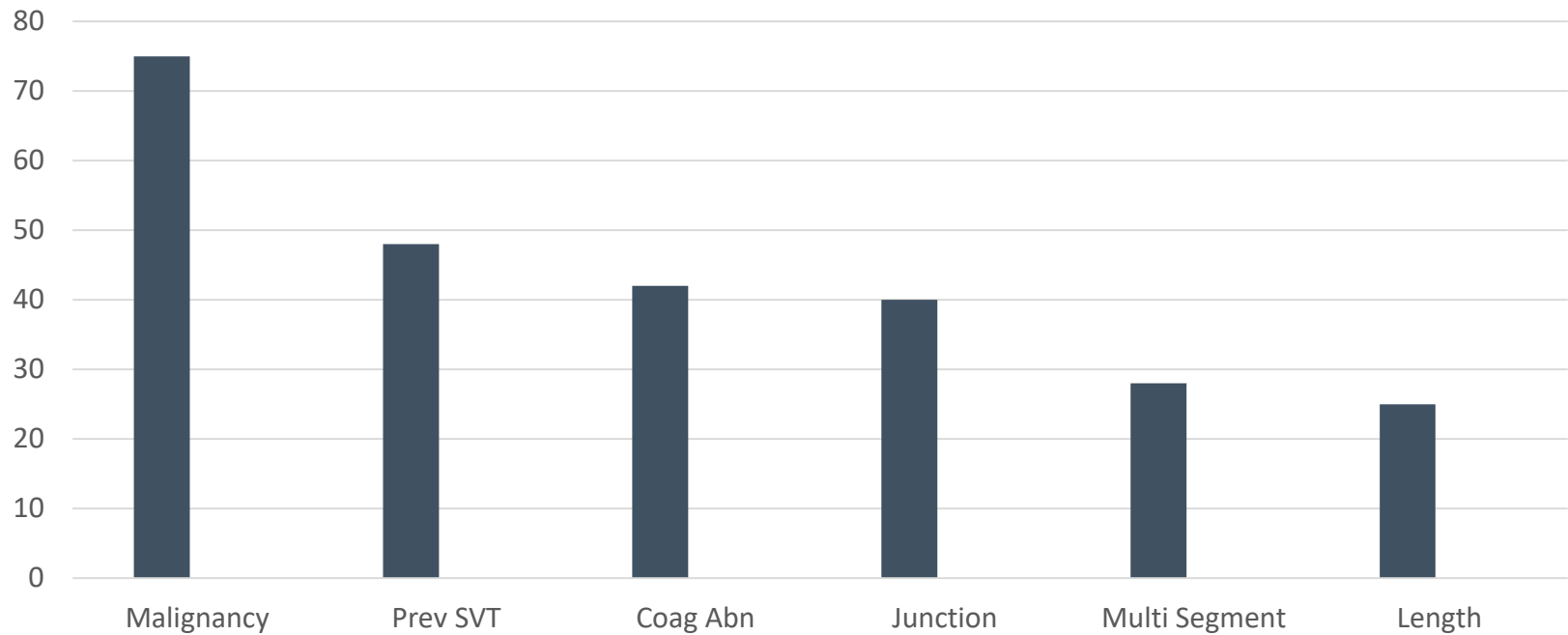


Extent

Results: Characteristics of SVT %



Results: Progression of SVT to DVT %



Conclusions

Venous Duplex Ultrasound can reliably identify and monitor SVT.

Assessment of risk factors is important to management decisions.

Malignancy, previous SVT, coagulation abnormality

SVT characteristics on VUS correlate with progression.

Length > 5 cm, **multi-segment disease**, within 2 cm of junctions.

Conclusions

Correlation of risk factors and SVT characteristics on VUS may guide patient management.

Intensive VUS surveillance is appropriate.

Further study with more patients over longer time-line may allow further assignment of relative risk of each factor.

Thank you. wooster@sympatico.ca