

2020

DVT SCAN ASSESSMENTS IN URGENT CARE PRESTON

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OBJECTIVES

The number of doppler scan requests have increased since the Covid pandemic with low positive results. This study identifies the prevalence of deep vein thrombosis (DVT) in the general population in Urban urban care centre

1044



THE TOTAL NUMBER OF DVTS ASSESSED IN 2020

46% MALE

54% FEMALE

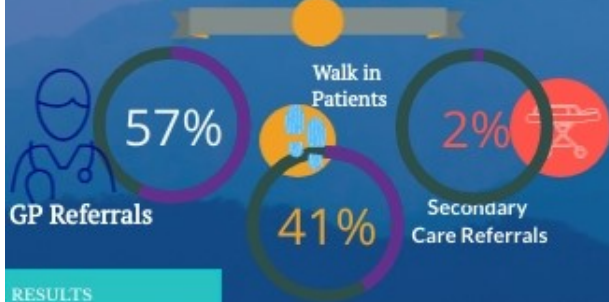
Females presented 8% higher



METHODOLOGY

The following data was collected between January 2020 and December 2020 from various sources for all patients who presented with suspected DVT. MINITAB 5.0 was used to analyse summary statistics of the patients' details, investigations, and scan results, along with correlation statistics.

Referral Sources



RESULTS

SYMPTOMATIC LEG

LEFT LEG SYMPTOMS ARE MORE COMMON



RIGHT LEG 44%
 LEFT LEG 54%
 1% (Other)

Attendance



WELLS SCORE

16.5% patients had a Wells score less than 1 and were classified as unlikely to have DVT (Keeling, et al 2004, Wells, et al 1997, Wells, et al 2003, Wells, et al 1995).



WELLS SCORE

A combination of Wells and D-dimers is used to diagnose DVT. Score 2 Wells has the highest level of positive D-Dimers.

D-Dimer & Wells score Ratio

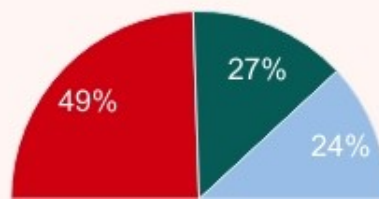


Positive D-Dimer (Red), Negative D-Dimer (Green)

49% of D-Dimers were positive, and 19% of these had a Positive DVT in their first scan, with a ratio of 1 positive DVT in 2.5 positive D-Dimers.

D-DIMER RESULTS

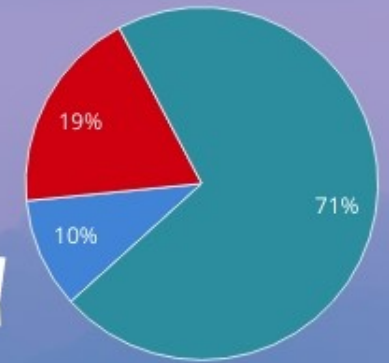
POSITIVE 506, NEGATIVE 281, NOT TAKEN 246



SCAN RESULTS

Equivocal 10%, Positive 19%, Negative 71%

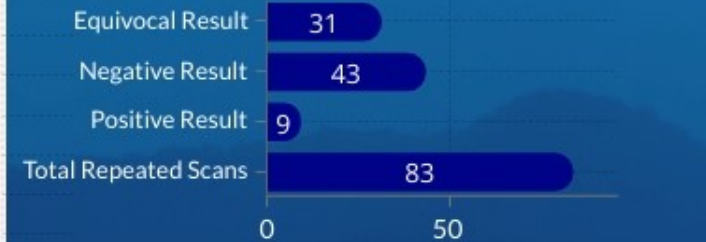
DVT SCAN + 19%



Provoked/Unprovoked DVT



Equivocal Repeat scan Result



Positive Scan (Red), Negative Scan (Blue), Equivocal Scan (Green)



D-dimer sensitivity and specificity for DVT were 84.6% (95% CI 77.60% to 89%) and 38.74% (95% CI 34.47% to 43.13%) respectively. Positive Predictive Value (*)28.74%, 95% CI 26.77% to 30.78% Negative Predictive Value (*)89.50%, 95% CI 85.21% to 92.65%

Conclusion D-dimer has a better negative predictive value, but alone it does not exclude isolated DVT. In patients with low pretest clinical probability, D-dimer had a negative predictive value of > 95% for DVT.