

VASCULAR CASE PRESENTATION

BUERGER'S DISEASE

Liz Lawrence
RDMS, RDCS, RVT

History

32 year old female presents to the Emergency room with discoloration of the left 5th toe for one week - and new onset of discoloration of right middle toe.

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Diagnosis of chronic fatigue syndrome due to lethargy of the legs
Also Fibromyalgia due to leg pain. Unable to sleep all night due to leg pain

History

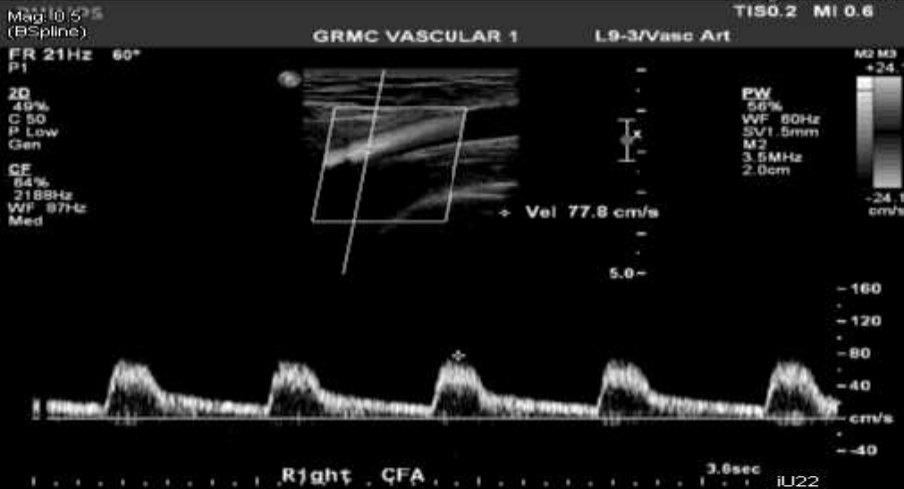
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Diagnosis of chronic fatigue syndrome due to lethargy of the legs
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Patient has complaints of lower abdominal pain for 2 years

iu22
Ex: ID41797
DUPLX LE/BYPASS GRFT BILAT
Se: 1/3
Im: 2 (ASC)

GENERIC INSTITUTION
PATIENT731
1901 January 1 F MR731
Acc: ACC41797
2015 July 18
Img Tm: 13:21:18

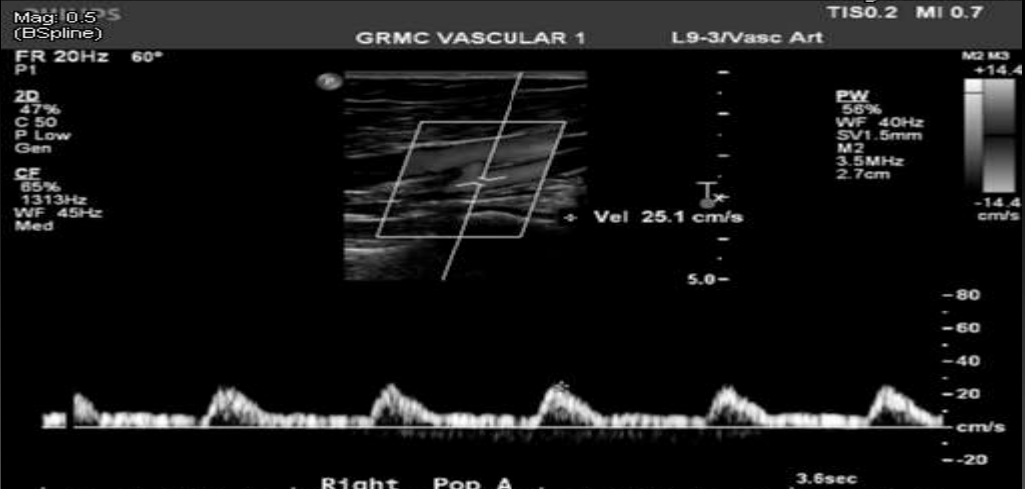


RIGHT
Brachial 120 mmHg
Ankle 80 mmHg
ABI .66

W: 231 L: 164

iu22
Ex: ID41797
DUPLX LE/BYPASS GRFT BILAT
Se: 1/3
Im: 11 (ASC)

GENERIC INSTITUTION
PATIENT731
1901 January 1 F MR731
Acc: ACC41797
2015 July 18
Img Tm: 13:25:36



W: 255 L: 128

iu22
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Se: 1/3
Im: 21 (ASC)

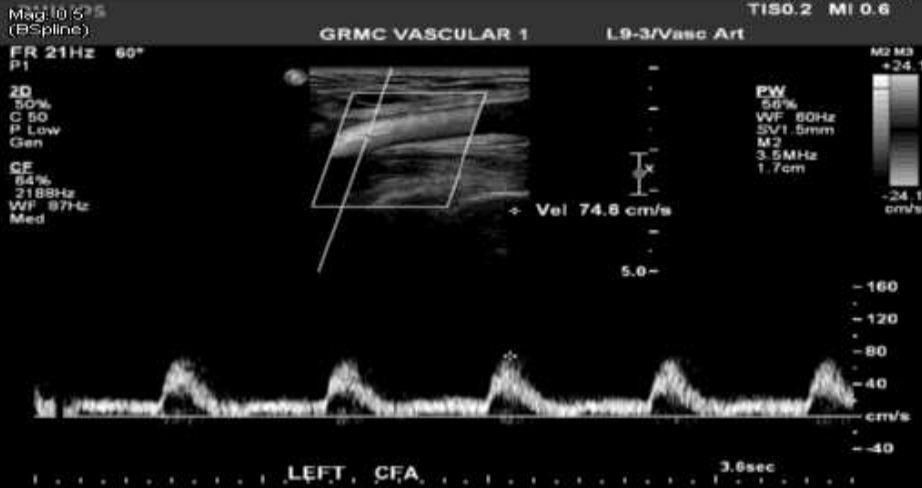
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PATIENT731
1901 January 1 F MR731
Acc: ACC41797
2015 July 18
Img Tm: 13:32:23



W: 255 L: 128

IJ22
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DUPLX LE/BYPASS GRFT BILAT
Se: 1/3
Im: 46 (ASC)

GENERIC INSTITUTION
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1901 January 1 F MR731
Acc: ACC41797
2015 July 18
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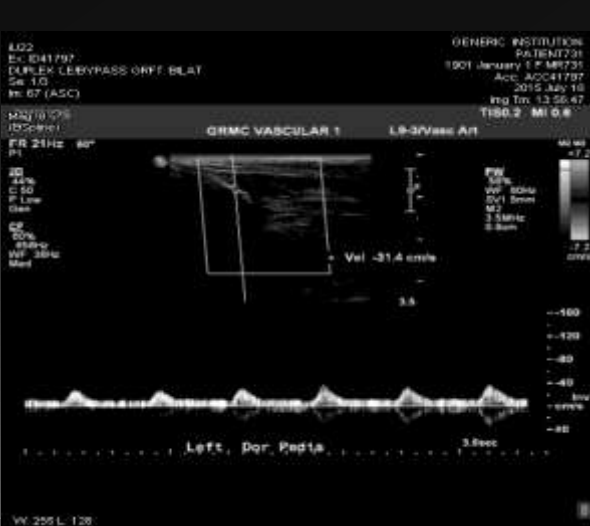


LEFT
Brachial 120 mmHg
Ankle 85 mmHg
ABI .70

8

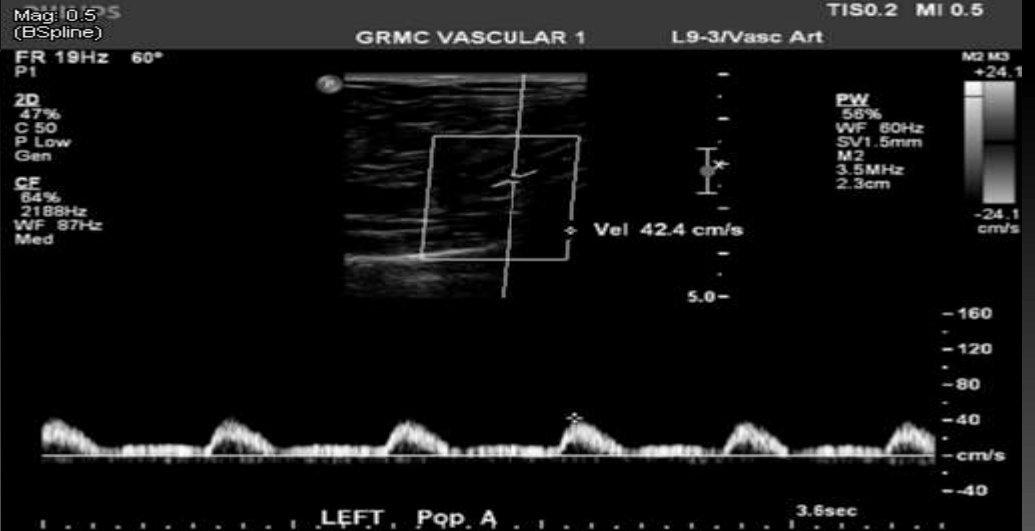
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GENERIC INSTITUTION
PATIENT731
1901 January 1 F MR731
Acc: ACC41797
2015 July 18
Img Tm: 13:50:19



W: 255 L: 128

IJ22
Ex: ID41797
DUPLX LE/BYPASS GRFT BILAT
Se: 1/3
Im: 54 (ASC)



W: 255 L: 128

Is the Exam
Complete?

IU22
Ex: ID41797
DUPLEX LE/BYPASS GRFT BILAT
Se: 1/3
Im: 23 (ASC)

GENERIC INSTITUTION
PATIENT731
1901 January 1 F MR731
Acc: ACC41797
2015 July 18
Img Tm: 13:35:21

Mag: 0.5
(BSpline)

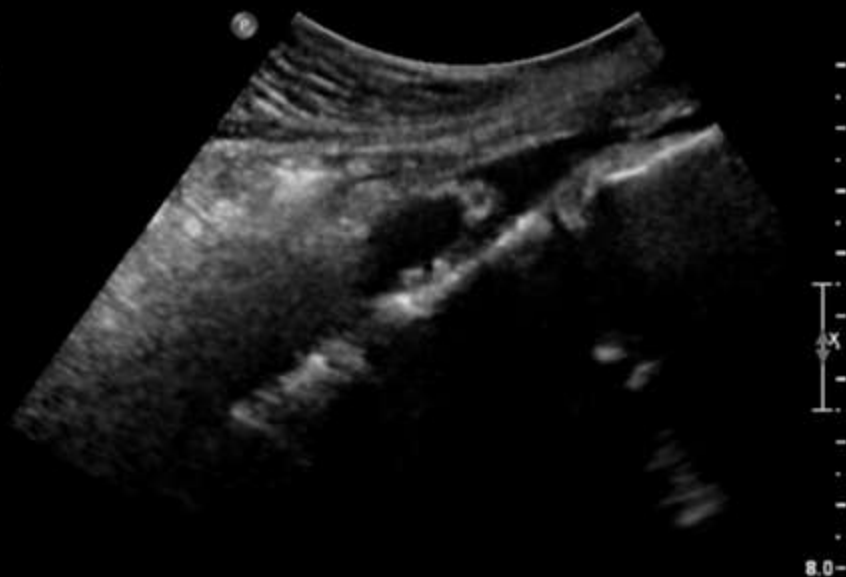
TIS0.4 MI 1.2

GRMC VASCULAR 1

C5-1/Abd Vasc

FR 40Hz
RS

2D
32%
C 55
P Low
HGen



AORTA MID

W: 254 L: 127

iJ22
Ex: ID41797
DUPLEX LE/BYPASS GRFT BILAT
Se: 1/3
Im: 24 (ASC)

GENERIC INSTITUTION
PATIENT731
1901 January 1 F MR731
Acc: ACC41797
2015 July 18
Img Tm: 13:35:49

Mag: 0.5
(BSpline)

TISO.4 MI 1.2

GRMC VASCULAR 1

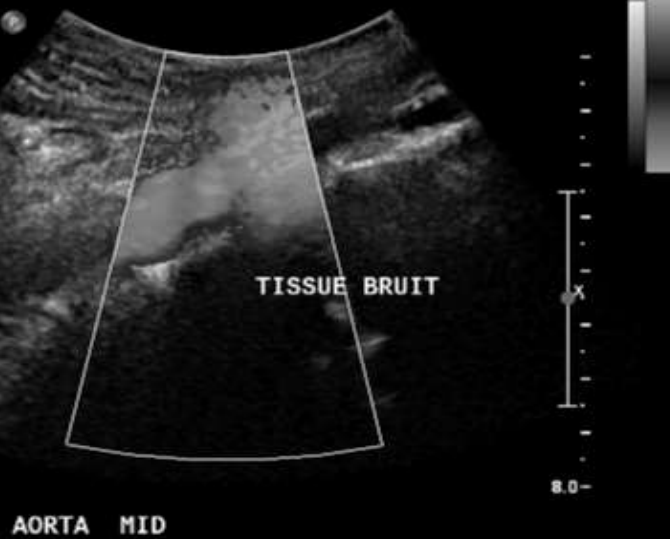
C5-1/Abd Vasc

FR 18Hz
RP

M3 M4

2D
33%
C 55
P Med
HGen

CPA
62%
1000Hz
WF 60Hz
Med



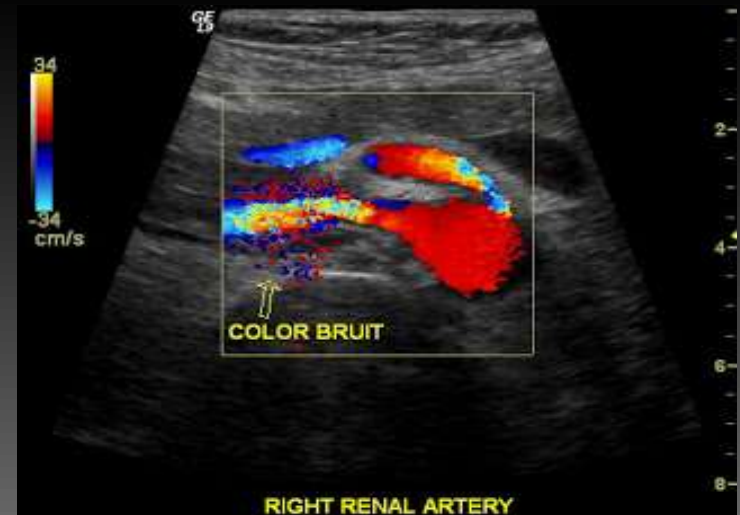
W: 231 L: 164



TISSUE BRUIT

Do not confuse this with
Artifact

When you see it recognize it as
a sign of a very high flow
velocity



iU22
Ex: ID41797
DUPLEX LE/BYPASS GRFT BILAT
Se: 1/3
Im: 35 (ASC)

GENERIC INSTITUTION
PATIENT731
1901 January 1 F MR731
Acc: ACC41797
2015 July 18
Img Tr: 13:41:21

Mag: 0.5
(BSpline)

TIS0.4 MI 1.2

GRMC VASCULAR 1

C5-1/Abd Vasc

FR 40Hz
RS

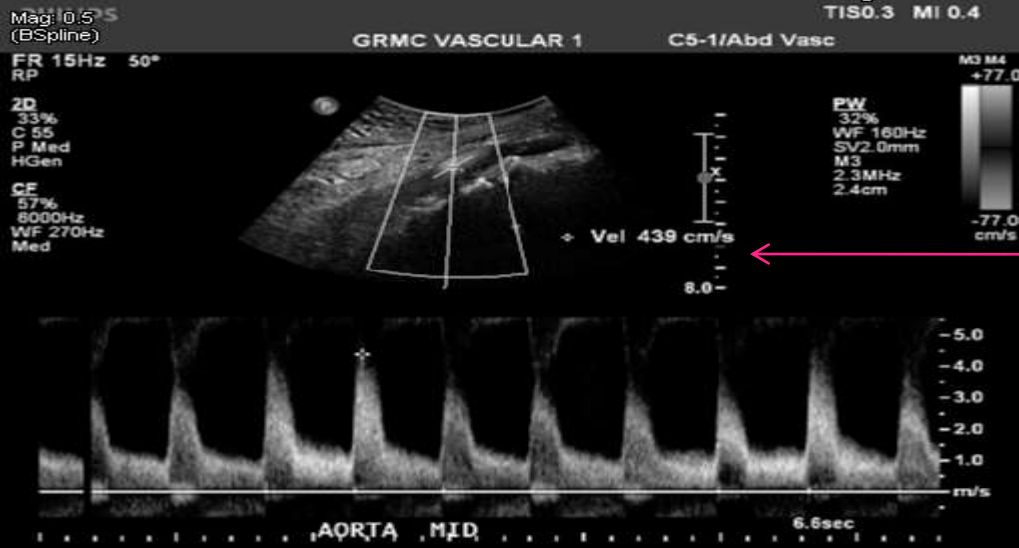
2D
32%
C 55
P Low
HGen



AORTA AT STENOSIS

iU22
Ex: ID41797
DUPLEX LE/BYPASS GRFT BILAT
Se: 1/3
Im: 31 (ASC)

GENERIC INSTITUTION
PATIENT731
1901 January 1 F MR731
Acc: ACC41797
2015 July 18
Img Tm: 13:37:58



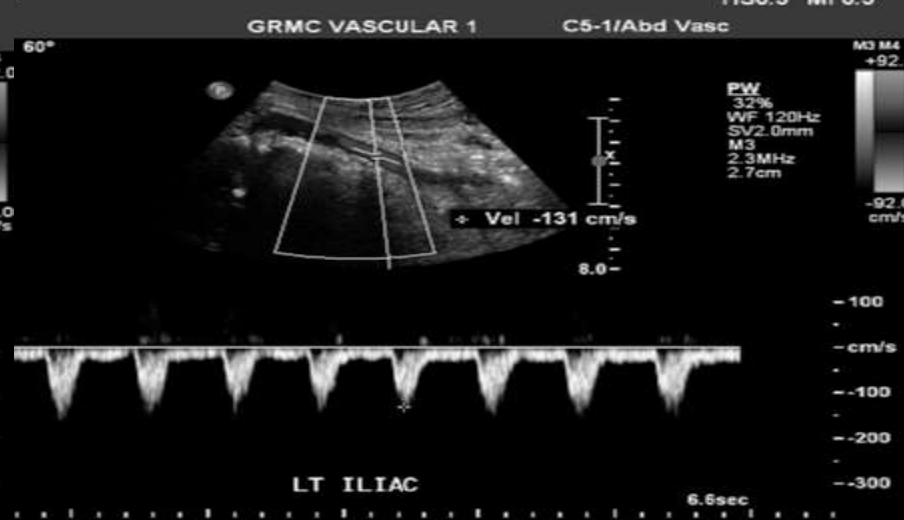
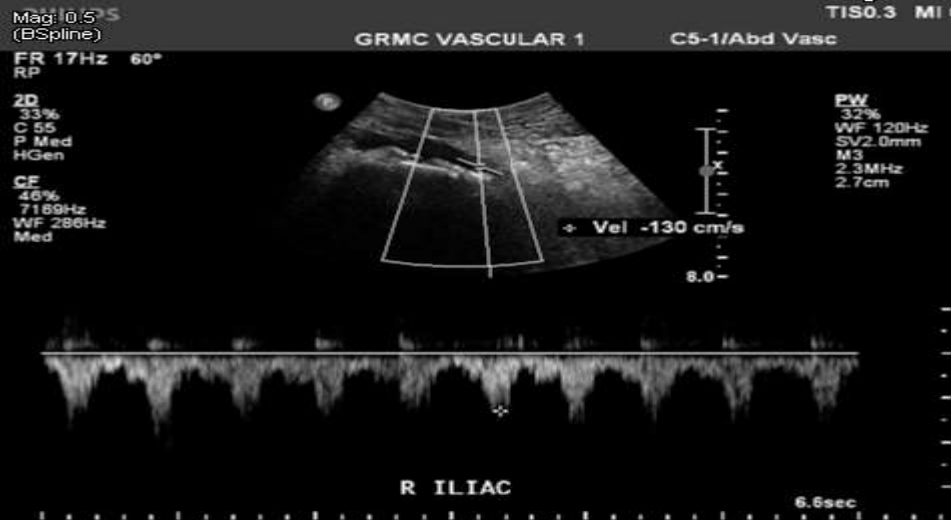
Aortic Flow:
439 cm/sec

Monophasic
R/L Iliac Arteries

iU22
Ex: ID41797
DUPLEX LE/BYPASS GR W: 255 L: 128
Se: 1/3
Im: 43 (ASC)

ACC: ACC41797
2015 July 18
Img Tm: 13:45:07

GENERIC INSTITUTION
PATIENT731
1901 January 1 F MR731
Acc: ACC41797
2015 July 18
Img Tm: 13:43:57



**Why would a 32 year old
Female patient have significant
Distal Abdominal Aortic Stenosis
Without evidence of
Atherosclerotic disease?**

Additional History

Patient states she has smoked between ***two to three packs per day for 17 years.*** Several attempts to quit smoking have been unsuccessful.

BUERGER'S DISEASE

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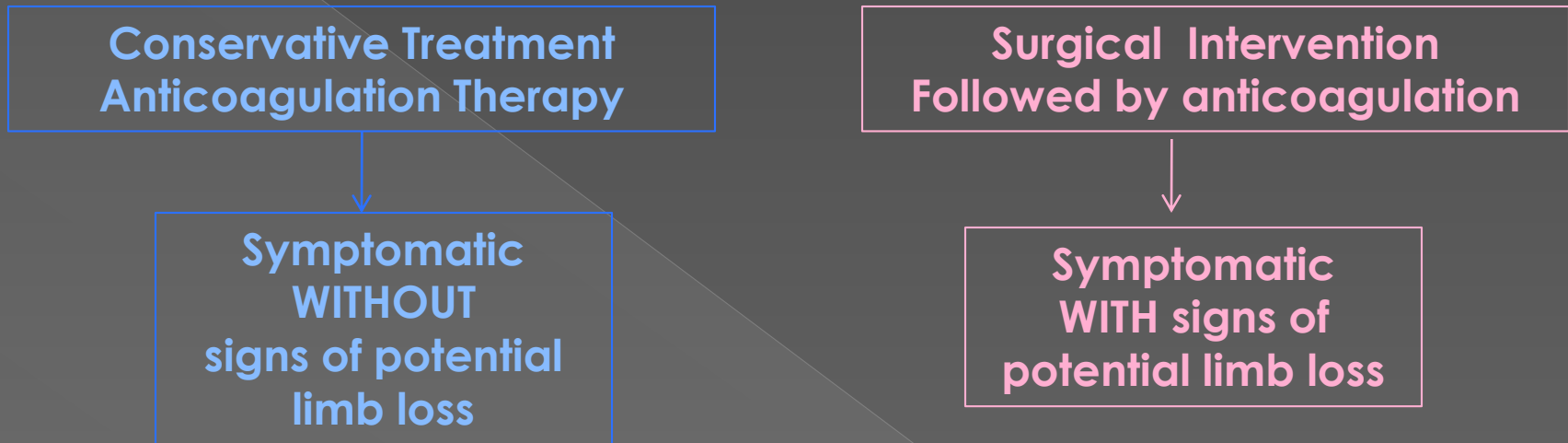
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Smoking, mostly male gender, genetic factors, infectious agents and mental stress due to poor socio-economic circumstances have all been suggested as possible trigger factors of Buerger's Disease.

Treatment Options for this Patient



This patient is experiencing embolization from the thrombus. Two Toes are at risk for amputation

Surgical Intervention was performed, Followed by anticoagulation therapy. Also an aggressive anti-smoking program was prescribed. Toes were not amputated . Patient is being monitored for possible arterial recanalulation of flow to the two effected toes.

Search of the literature

Ann Vasc Surg 1999 Jan;13 (1):52-9

Primary aortic mural thrombus; presentation and treatment.

Han TL, Daising MC, et al

Department of Surgery, Peripheral Vascular Surgery Section,
Indiana University School of Medicine

J Vasc Surg. 2002 Oct, 36 (4) 713-9

Anticoagulation is an effective treatment for aortic mural thrombi.

Bowdish ME, Weaver, FA, Liebman HA, Rowe, VL, Hood DB

Division of Vascular Surgery, Department of Surgery, Keck School
of Medicine, University of Southern California