

노인 혈관질환

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Indications for Carotid Artery Stenosis Treatment

- 증상이 없는 경우 70%이상의 경동맥 협착증
- 증상이 있는 경우 50%이상의 경동맥 협착증
- 죽종내 궤양을 동반한 경동맥 협착증

- 증상이란, 일시적 뇌허혈(Transient Ischemic Attack)
또는 일과성흑내장(amaurosis fugax)

Duplex scan Findings of Carotid Artery Stenosis

Disease Category	PSV(ICA)	ICA/CCA Ratio	EDV(ICA)	Plaque Image
Normal	<125cm/sec	<2	<40cm/sec	Non
<50%	<125	<2	<40	IMT>1.5mm <50% DR
50-69%	125-230	2.0-4.0	40-100	Present >50% DR
>70%	>230	>4.0	>100	>50% DR
Near Occlusion	Low or undetectable	Variable	Variable	Trickle flow
Occlusion	No flow	Not applicable	Not applicable	Occluded lumen

PSV : Peak Systolic Velocity
 ICA : Internal Carotid Artery
 CCA : Common Carotid Artery
 EDV : End Diastolic Velocity
 DR: Diameter Reduction

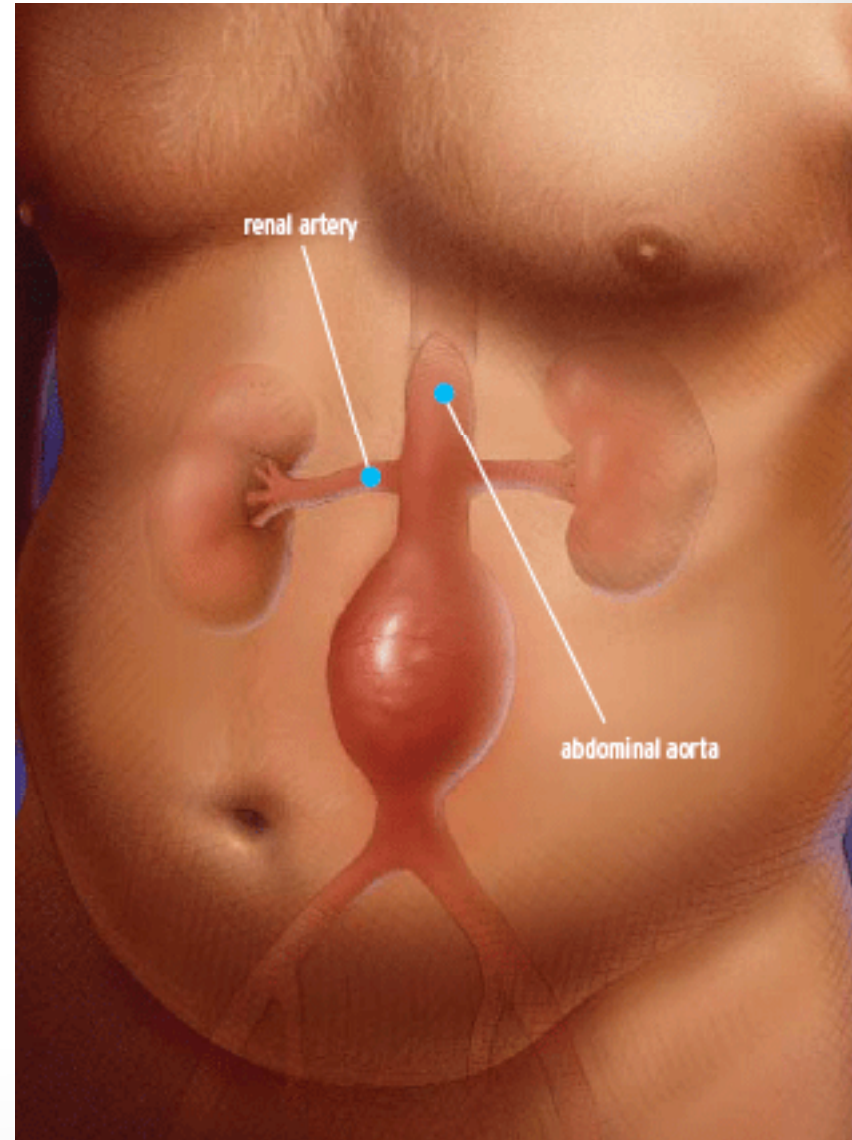
Abdominal Aortic Aneurysm

복부에 있는 혈관의 혈관이 부풀어 돌기나 풍선 형태로 변형되는 질병.

정상인 복부 대동맥의 혈관 크기는 2cm 미만

복부대동맥류는 직경 3cm 이상

파열시 50-90% 사망하여 예방적 치료가 중요함.



Risk Factors for AAA Rupture

Risk factors	Low risk	Average risk	High risk
Diameter	<5cm	5-6cm	>6cm
Expansion	<0.3cm/yr	0.3-0.6cm/yr	>0.6cm/yr
Smoking, COPD	None, mild	Moderate	Severe/steroids
Family history	No relatives	One relatives	Numerous relatives
Hypertension	Normal	Controlled	Poorly controlled
Shape	Fusiform	Saccular	Very eccentric
Gender		Male	Female

Screening for Abdominal Aortic Aneurysms

- Consensus of SVS in 2003 :
baseline ultrasound screening
for male(60-85), female(60-85) with cardiovascular risks, male or female(>50) with family history of AAA
Subsequent ultrasound screening
annually for AAAs(4.0-4.5) and every 6 months for AAAs(> 4.5)
- Screening Abdominal Aortic Aneurysms Very Efficiently (SAAAVE) Act in the US : age 65, for male ever-smokers and men and women with a family history of AAA



Indication for AAA Repair

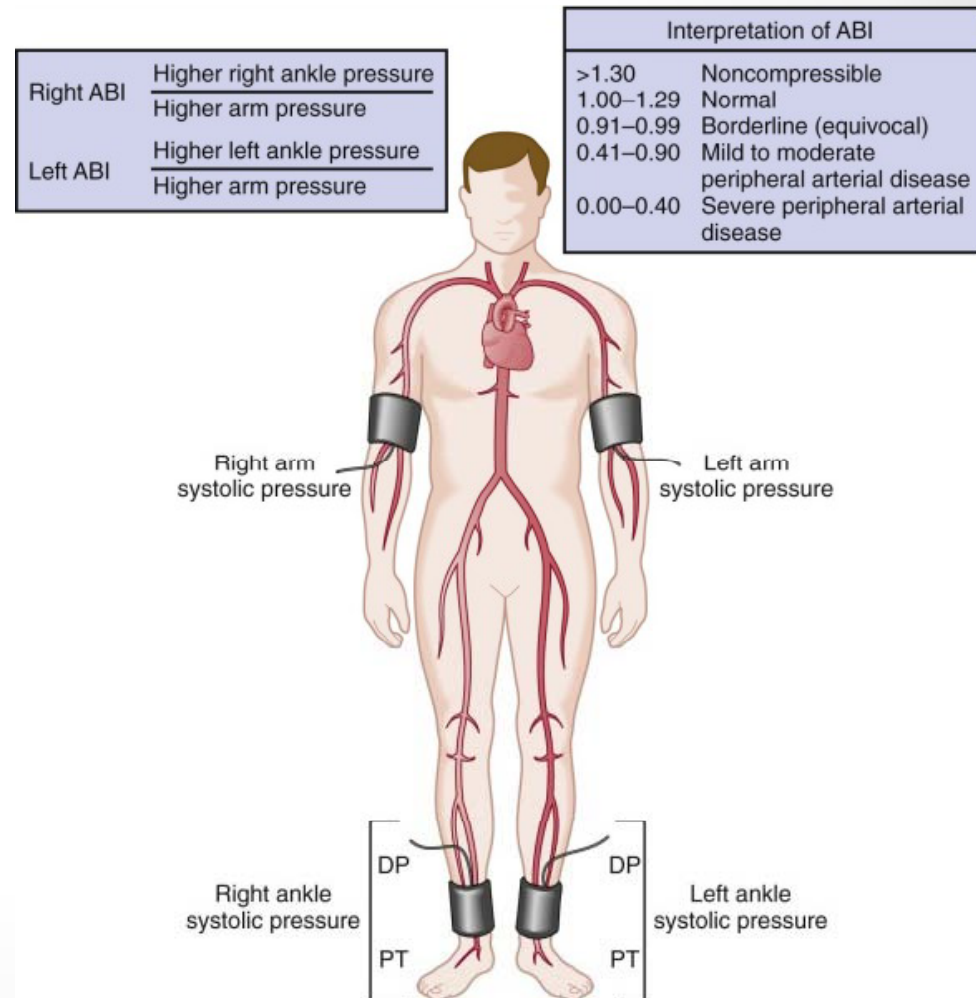
- AAA > 5.5cm in male, >5cm in female
- AAA expansion rate 1 cm/year
- Symptomatic AAA

- subsets of younger, low-risk patients, with long projected life expectancy, may prefer earlier repair
- If the surgeon's operative mortality rate is low, repair may be indicated at smaller sizes (4.5-5.4 cm) if that is the patient's preference
- For women and patients with a greater than average rupture risk, an AAA diameter of 4.5 to 5.0 cm is an appropriate threshold for elective repair

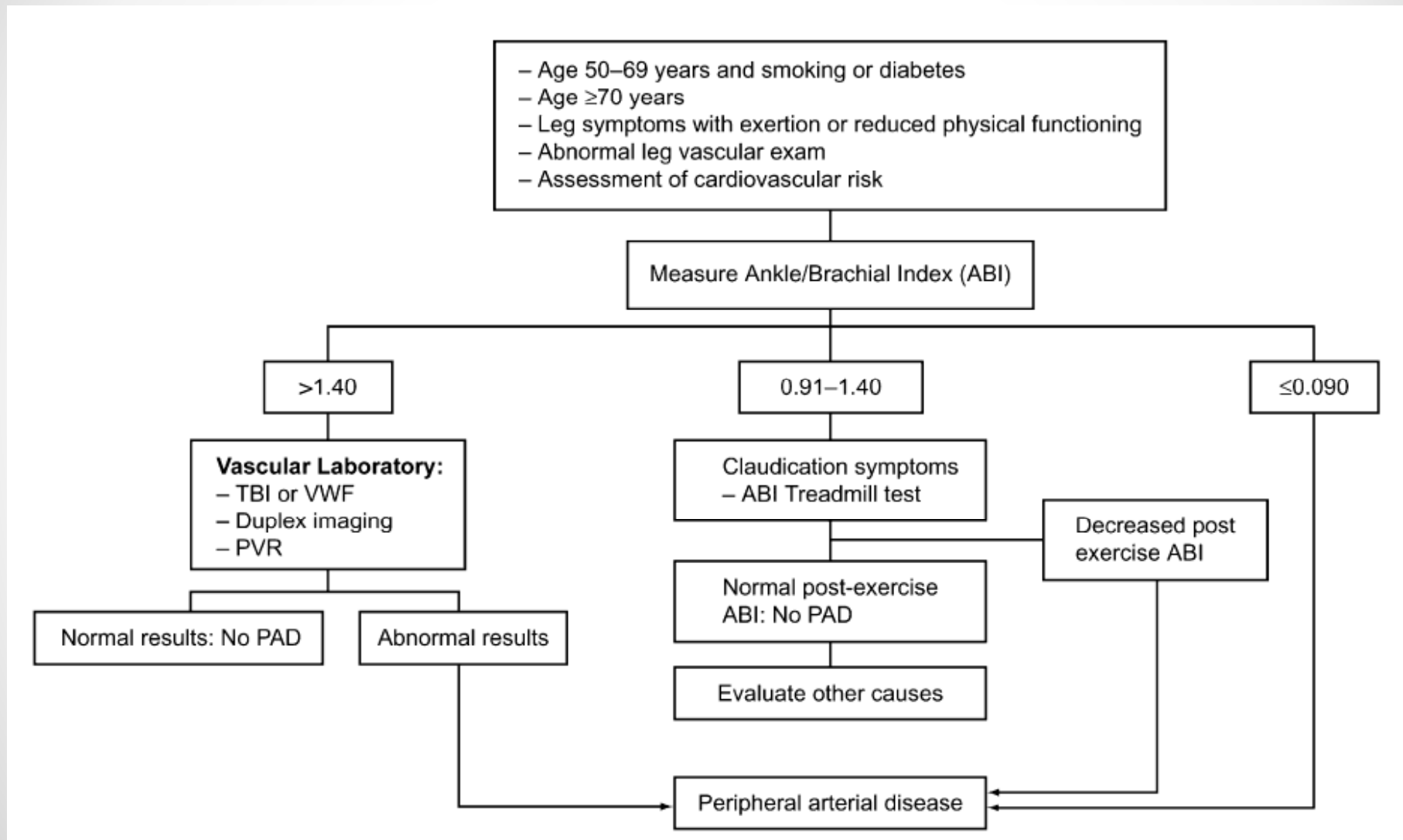


PAOD(Peripheral Arterial Occlusive disease)

Ankle-brachial index(ABI)
- to document the **presence of LE arterial occlusive disease**
- using CW Doppler, PPG, duplex US



Algorithm for Diagnosis of PAOD



TBI:toe brachial index, VWF:velocity wave form, PVR:pulse volume recording
Hiatt WR. N Engl J Med 2001;344:1608-1621

Questionnaire for PAOD

1. Do you experience aching, cramping or pain in your arms, legs, thighs or buttocks when you walk or exercise? Yes No
2. If you answered "yes" to question number 1, Does the pain go away with rest? Yes No
3. Do you have numbness and tingling in your arm(s) or leg(s) or feet? Yes No
4. Are your fingers or toes pale, discolored, or bluish? Yes No
5. Are your hands or feet cold to the touch? Yes No
6. Do you have open sores or ulcers on your leg(s) or feet that won't heal? Yes No
7. Do you exercise on a regular basis? Yes No
If no, what keeps you from exercising? _____
8. Do you have a family history of diabetes or cardiovascular problems (immediate family: parent, sister, brother)? Yes No
9. Have you had any previous surgeries and/or angioplasty on the arteries in your legs, arms, or kidneys? Yes No

