VASCULAR SCREENING: For Whose Benefit? or How an inherently good idea can cause harm and unhappiness

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No Potential Conflicts to Disclose

SELF-EVIDENT TRUTH 1
Asymptomatic Carotid Stenosis

SELF-EVIDENT TRUTH 2
AAA
SELF-EVIDENT TRUTH 3

Asymptomatic pulselessness

NOW, WHAT COULD POSSIBLY BE WRONG WITH ALL THAT?

Dx Asymptomatic Stenosis

reported to PCP

Referral to Specialist (VS, IC)
Dx Asymptomatic Stenosis reported to PCP

Referral to Specialist (VS, IC)

Physician's委员会和血管造影术 VS, IC

A GOOD THING TO DO...?

WOULD THIS INDIVIDUAL BE BETTER-OFF NOT KNOWING?!

Most screening-Dx AAAs are small (or even non-aneurysms!)
- Rupture risk of small aneurysms is exceedingly low
- No evidence that elective repair of men's AAAs <5.5cm is of benefit

(WOMEN ARE AT MUCH HIGHER RISK THOUGH)
Dx of AAA (likely small) reported to PCP

Referral to Specialist (VS, IC)

Routine screening for AAA in older men may harm more than help
Deaths from abdominal aortic aneurysm among Swedish men are going down—but not because they're being screened for the potentially fatal condition. Although the death rate has decreased by 70% since the early 2000s, screening only saved 2 lives per 10,000 men screened. It did, however, increase by 59% the risk of unnecessary surgery as reported by Johansson et al. in the June 16 issue of the Lancet.

Lancet 2018;391:2441-7

Intermittent Claudication

What Happens in the Next 5 Years?

Limb Outcomes

Life/Events

Interruption of the blood flow leads to muscle weakness.

Fear marketing

PAD identifies patients at very high cardiovascular risk.
For a screening test to be worthwhile, it has to meet several criteria. You want to know the predictive value of a positive test in the population being screened. You want to know not just whether it picks up an abnormality, but whether picking up that abnormality will allow earlier treatment that will make a difference in outcome. You want to know whether false positive tests will lead to harmful invasive procedures.

**Bottom line:** does the test do more good than harm?