Enhancing AAA Screening at the OUFCM Clinic

Franklin T. Perkins III, MD, MBA; Chad Keeney, MD; Jennifer Weakley, MD
Department of Family & Community Medicine, OU-TU School of Community Medicine, Tulsa OK

Introduction

Abdominal Aortic Aneurysms (AAA) are enlarged, dilated, and weakened portions of the aorta within the abdominal cavity. They are often benign and asymptomatic but can be life threatening if they rupture with an estimated mortality of 81%. People with the highest risk are older male smokers.

The US Preventive Service Task Force (USPSTF) recommends that all men aged 65-75 who have ever smoked receive a onetime ultrasonography screening.

The goal of our Quality Improvement project is to improve AAA screening at the University of Oklahoma, Department of Family and Community Medicine (OUFCM) Clinic by 5% for this population by 06/2020, through education and bedside ultrasonography (BSUS).

Methods

Baseline data was collected from clinic dashboard and patient panels of two residents at OUFCM (intervention group) and two of three clinic modules (control group) 09-10/2019.

Patients who met criteria for the study were males aged 65-75 who had ever smoked and were due for an AAA screening. All participants were called by clinic staff or the physician in 11/2019 to discuss the importance of AAA screening.

The intervention group was scheduled for an appointment with education and BSUS, and then referred for a formal AAA screening. The control group was only referred for a formal AAA screening. All patients were then followed from 12/2019-03/2020 to see if they obtained a formal AAA screening.

Results

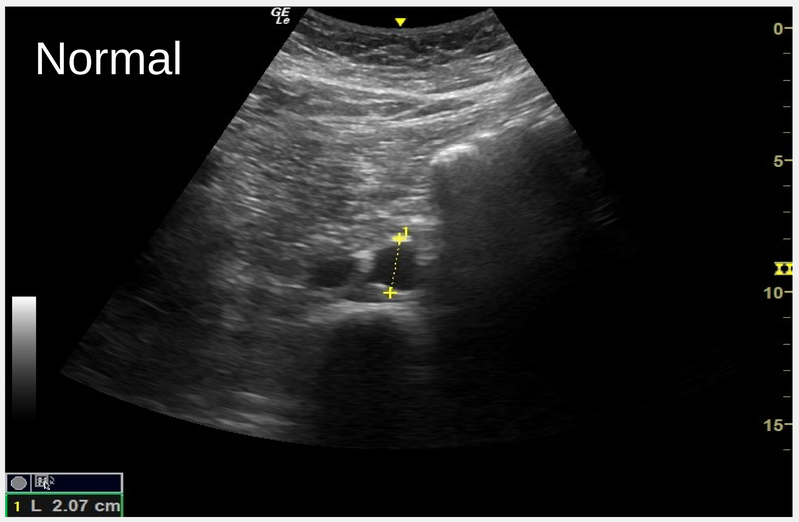
Fifty-two (52) patients met inclusion criteria (control N=37, average age 69; intervention N=15, average age 68).

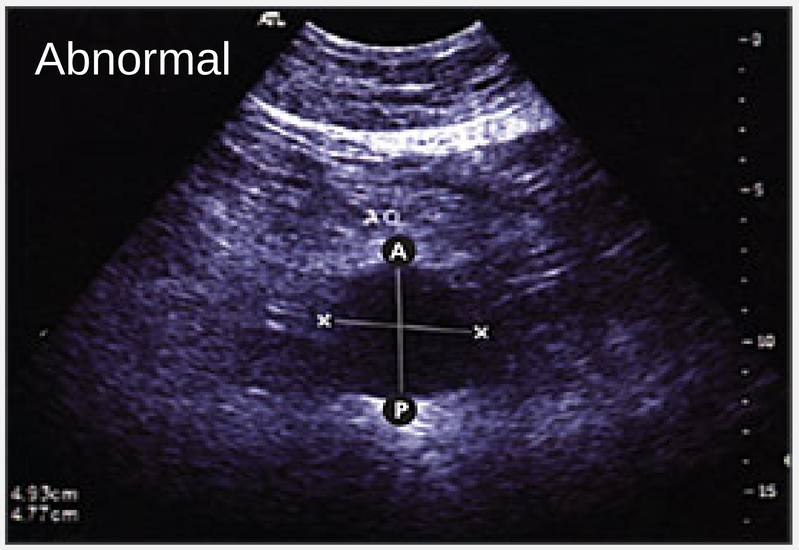
The PDSA resulted in 53% (8/15) patients from the intervention group being scheduled and seen for an appointment with education and BSUS, of which 38% (3/8) patients completed the formal AAA screening. For the control group, 46% (17/37) agreed to a referral but only 6% (1/17) completed a formal AAA screening.

Surveillance for Patients with Stable Abdominal Aortic Aneurysm

SURVEILLANCE INTERVALS		
ANEURYSM DIAMETER	*ACC/AHA GUIDELINES*	*RESCAN COLLABORATORS*
<3.0 cm	No surveillance*	---
3.0 cm - 3.9 cm	Ultrasonography every two to three years	Three years
4.0 cm - 5.4 cm	Ultrasonography or computed tomography every six to 12 months	Two years for 4.0 - 4.4 cm
>5.4 cm	Surgical consultation for elective repair	---

ACC = American College of Cardiology; AHA = American Heart Association
*---Clinicians may consider ongoing surveillance for at-risk patients with aortas 2.5 – 2.9 cm in diameter.





Discussion

The OUFCM outpatient clinic serves an older patient population with a high prevalence of tobacco use who would benefit from the USPSTF recommended screening for AAA. The USPSTF report population-based screening ranged from only 1.6%-7.2%.

BSUS is a simple tool for primary care providers, and in our study, it did enhance completion rates for our patients.

Areas of concern include entry of the result into the correct location within the electronic medical record, timely follow-up to ensure completion of screening, and communication between AAA screening facility and patient for scheduling effectiveness.

Conclusions

AAA screening is both safe and accurate however national screenings remain low. Screening done in the OUFCM clinic was also low; however, after directed and intentional intervention, screenings increased. We believe that if Primary Care Physicians are trained in BSUS, then screenings in any clinic would increase and offer timely results.

References

1. https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/abdominal-aortic-aneurysm-screening
2. https://www.aafp.org/afp/2006/0401/p1198.html
3. https://www.aafp.org/afp/2015/0415/p538.html