

Hypertension and Obesity at the Health Fairs

Aliza Epstein MS3

October 23, 2013



DOCS
Mitchell Wolfson Sr.
Department of Community Service

DOCS Lecture Series

What is Screening? (vs. Diagnosis)

Identification of an unrecognized disease or risk factor in a seemingly ***healthy, asymptomatic population***



Early intervention



Decrease morbidity
and mortality

Criteria for a Screening

Disease with

- High prevalence
- High impact on morbidity and mortality
- Effective early treatment

Test is

- Simple, safe, acceptable to patients
- Cost-effective
- Highly sensitive → diseased will test positive
- Highly specific → healthy will test negative

Vitals Station



Hypertension

Classification	SBP (mm Hg)		DBP (mm Hg)
Normal	<120	AND	<80
Pre-HTN	120-139	AND	80-89
Stage 1	140-159	OR	90-99
Stage 2	>160	OR	>100

- Highly prevalent
- Most people are asymptomatic
- Complications: **CV, Ophtho, Neuro, Renal**
- Early interventions work!
 - **Lifestyle modifications**
 - *DASH diet/reduced salt intake, exercise/weight loss, reduced EtOH*
 - **Pharmacologic**
 - *Thiazides, β blockers, Ca-channel blockers, ACEi/ARB*

Hypertension Screening

Screen for HTN with BP Measurement

- Safe, cheap
- Highly sensitive
- Specific, albeit less – random fluctuations

OVERALL: USPSTF Grade A for adults

Screening at the health fair

- Sitting in the chair, supported back, feet on the floor, arm supported at heart level
- Appropriate sized blood pressure cuff
- Take blood pressure in both arms

- SBP is the point at which the first of two or more sounds is heard
- DBP is the point before the disappearance of the sounds

HTN at the Health Fair

REMEMBER: Screening vs. Diagnosis

Classification	DOCS Rec	General Rx
Normal	No referral	None
Pre-HTN	Counsel and referral	Lifestyle modifications
Stage 1	Counsel and referral	Lifestyle mod + pharm
Stage 2 Stage 2 + symptomatic	High risk Referral Physician consult	Lifestyle mod + pharm x2

Counseling

- Lifestyle Modifications
 - Weight reduction
 - DASH eating plan
 - Dietary sodium reduction
 - Physical activity
 - Moderation of alcohol consumption

Hypertension diagnosis

- Diagnosis of HTN is based on the average of two properly taken blood pressure measurements at two or more office visits.

Obesity and BMI

- **Obesity** - An excessive amount of body fat, which increases the risk of medical illness and premature death
- **BMI** - A measurement of the relative composition of lean body mass and body fat; calculated as weight in kilograms/(height in meters)²
 - Used as a quick and easy measure of overweight and obesity

Obesity

Classification	BMI kg/m ²
Underweight	<18.5
Normal	18.5-24.9
Overweight	25-29.9
Obesity	30-39.9
Morbid Obesity	>40

Common Complications of Obesity

CAD	CVA
Cholelithiasis	Degen. Joint
Eating disorder	Hyperlipidemia
HTN	Infertility
Malignancies	Irregular menses
Mood disorder	PCOS
OSA	DM2

- Highly prevalent

 - *33.3% adult men, 35.3% adult women, 16% 2 to 19 year olds*

- Early intervention works!!

 - Dietary restriction + Exercise + Behavior therapy**

Obesity & The Metabolic Syndrome

Definition: state of insulin resistance characterized by abdominal obesity, dyslipidemia, elevated BP, impaired fasting glucose

Present in:

- 5% of normal weight
- 22% of overweight
- 60% of obese

At least 3 of the following for Dx

Waist circumf: M >40", F >35"

TG >150 mg/dL

HDL: M <40 mg/dL, F <50 mg/dL

BP > 130/85 mm Hg

Fasting blood glucose > 110 mg/dL

REMEMBER: Screening vs. Diagnosis

Obesity Screening at the Health Fair

BMI = weight (kg) / height² (m²)

- Safe, cheap
- Sensitive, specific

DOCS rec for overweight/obese:

- Educate/Counsel on diet and exercise
- Refer to PCP

Sources

- Case Files: Family Medicine
- Step-Up To Medicine
- Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure

Thank you!

Have Fun at Little Haiti!