PREVENT THE 3 YEAR PROGRESSION FROM ERECTILE DYSFUNCTION TO MYOCARDIAL INFARCTION

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Introduction

Erectile dysfunction (ED) is a common vascular disorder. Because the penile arteries are smaller in diameter than the coronary arteries, men may experience ED on average 38 months before the onset of their angina.[1]

This helpful early warning symptom can alert clinicians to target their advice and treatment to reduce the risk of future cardiovascular events.

Gold standards

The British Society for Sexual Medicine (BSSM) on the management of erectile dysfunction (2009)[2] and the European Association of Urology (EAU) on male sexual dysfunction (2012)[3] set guidelines on how to perform a timely cardiovascular risk assessment in these high risk patients.

Aim of audit

The audit evolved during my primary care Foundation placement. A large number of men suffered with erectile dysfunction but symptoms were often only disclosed after direct questioning. Treatment without a coded diagnosis was not uncommon. The aim of this audit was to standardise and improve the management of ED.

Method

A retrospective audit captured 154 patients over a five year period, who presented with ED for the **first** time or received treatment (Phosphodiesterase type 5 inhibitors) in an urban GP Practice.

Cardiovascular risk assessment at initial presentation was compared to the gold standards (Fig.1)

Personalised feedback was given to each GP to highlight the importance of ED and its associated risks.

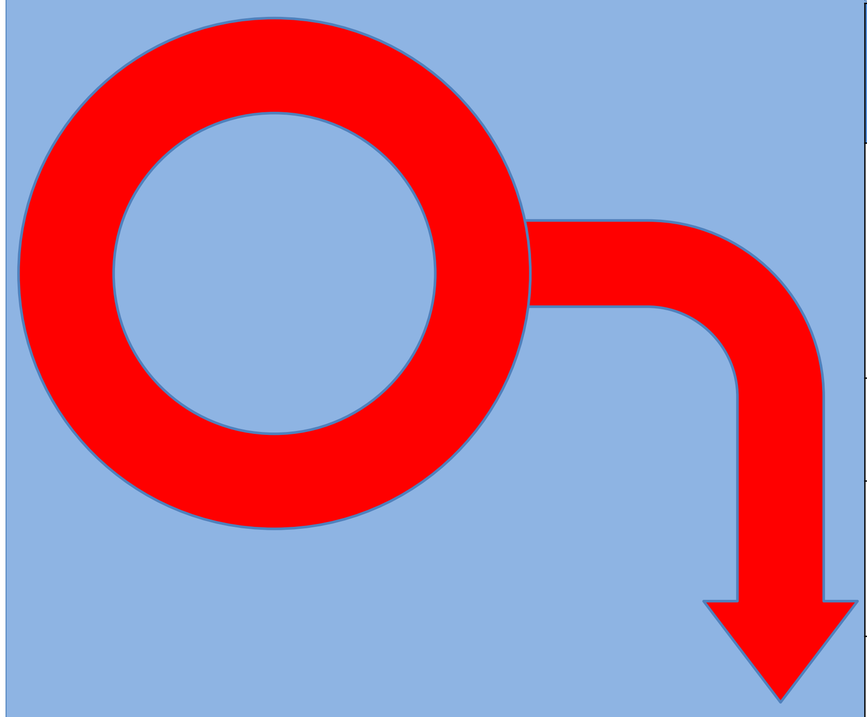


Figure 1. Gold standards set by the BSSM[2] and EAU[3] on performing a timely cardiovascular risk assessment at initial presentation of erectile dysfunction

Measurement	Timing in relation to a diagnosis of ED or first PDE5 prescription
• Blood pressure • Heart rate • Waist circumference • Weight • Smoking Status	Within last **6** months
• Serum lipids • Fasting plasma glucose	Within **12** months
• Testosterone ○ If low, was Prolactin/FSH/LH measured?	Within **6** months
• Cardiovascular risk ○ (QRisk2, QRisk1, JBS)	Recorded within **6** months
• PSA	Within **6** months

Figure 2. The number of patients with ED who received the appropriate physical examination within 6 months of initial presentation

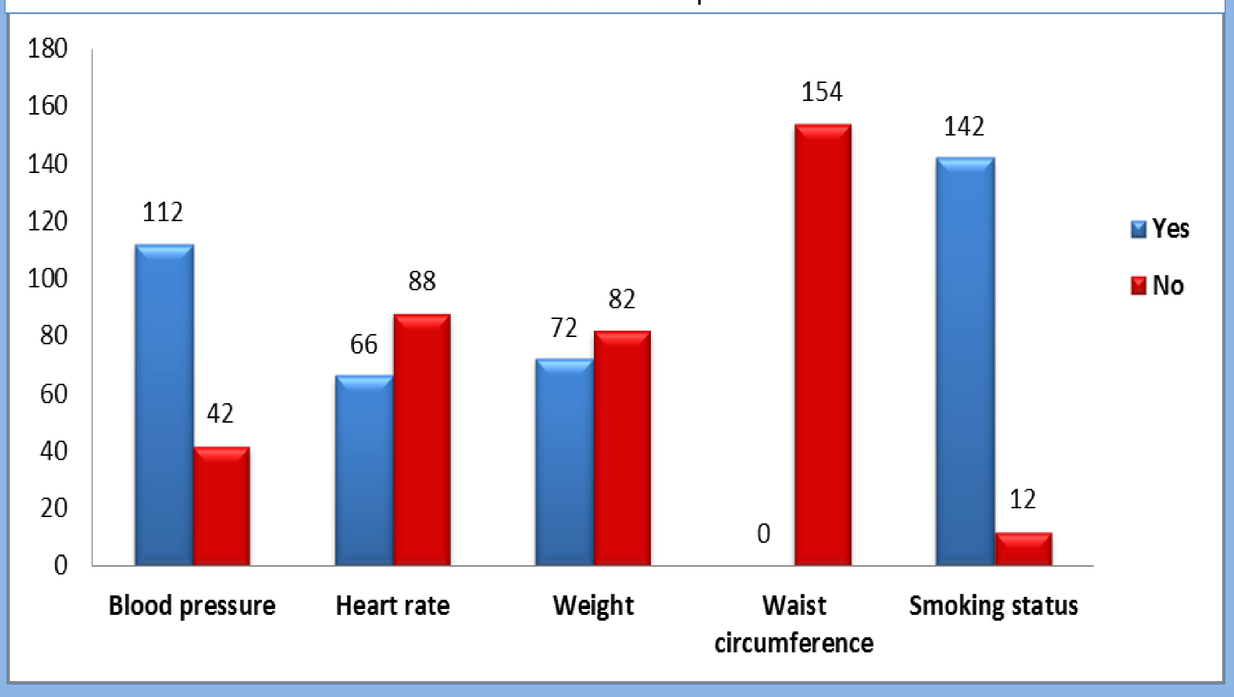
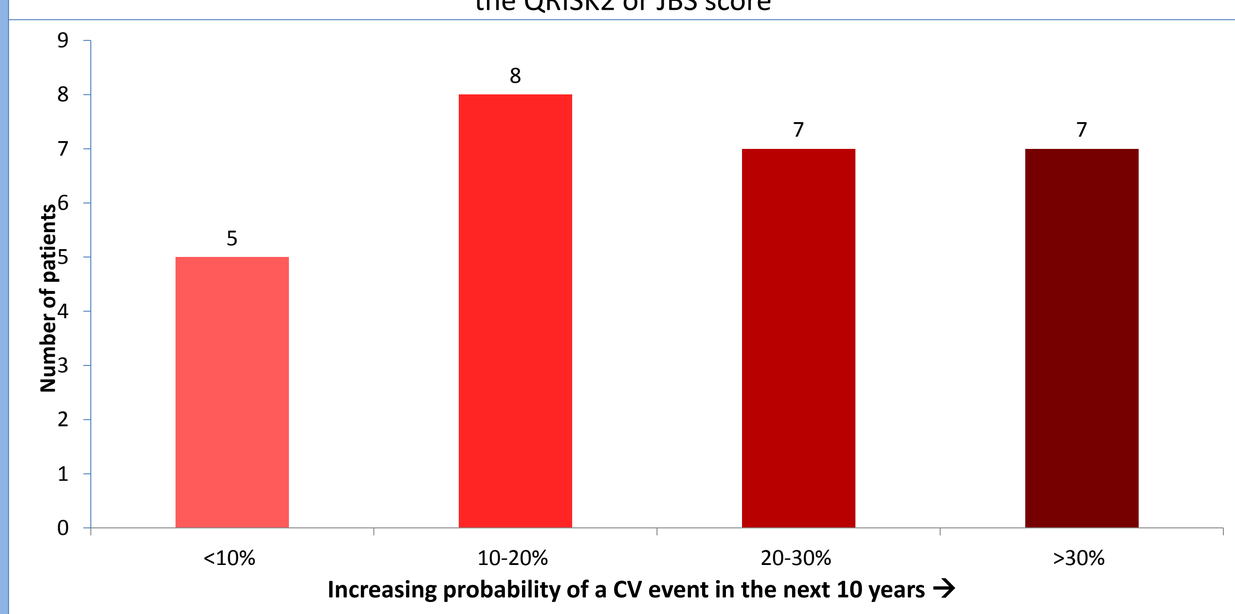


Figure 3. The probability of patients having a cardiovascular event in the next 10 years based on the QRISK2 or JBS score



Results

The majority of patients had the appropriate physical examinations within 6 months of presentation (Fig. 2)

No waist circumferences were measured.

Serum lipids and fasting blood glucose were recorded in 72% and 75% cases respectively. Few (12%) had a testosterone levels checked.

Cardiovascular risk scores e.g. QRISK2 were documented in only 24% of cases. However half of these patients had greater than 20% probability of a future cardiovascular event within 10 years (Fig.3)

Conclusion

Men with erectile dysfunction are at high risk of cardiovascular events[4] (Fig.3)

'A man with ED is a cardiac patient until proven otherwise' [5]

A thorough cardiovascular risk assessment must include:

•Waist circumference - central adiposity increases the risk of developing diabetes and cardiovascular disease[6]

•Testosterone levels - hypogonadism is a reversible cause of ED

•A cardiovascular risk score is personalised to each patient. This could motivate some to make lifestyle modifications and comply with drug treatment, thereby reducing their risk of future CV events.

References:

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