



Global evaluation of men – check-up and follow-up

Women, after childhood are rapidly attended by Gynecologists, even during puberty. They become their physicians and responsible for their follow-up. On the other hand, men routinely remain for a long period of time unattended until the 5th decade of life, when, in the best of scenarios, they visit a lot of professionals of several specialties.

We could draw a long discussion about the need of medical attention between these two periods of life, but we will stick to check-up and follow-up of adult men. Usually as Urologists we are the first doctors these men interact with and at that moment we could play a definite role in providing global health evaluation.

For more than one decade Brazilian Society of Urology has launched campaigns to promote Urologists as the doctor of men. With that in mind, it is important that we recognize which are the actual needs of periodical medical care for these men.

Which is the minimal evaluation should we propose to an adult man?

Basically it is necessary a detailed anamnesis and physical exam in order to evaluate several body systems. On the contrary, since there are plenty of subsidiary exams and tests available for each specialty, it is important to establish which are important for our target population, in order to evaluate these men efficiently. The guidelines of medical specialties provide information on this matter. They are not absolute rules, but allow for a specialty approach based on medical literature with high level of evidence. Another important aspect to be considered is that in the last 80 years we moved from an infectious diseases scenario to a pattern similar to richer countries, with mainly cardiovascular and neoplastic diseases (1). We must take into account the high prevalence of such illnesses when we decide which routine periodic evaluation to adopt.

Several models and scores were developed in order to create “*Cardiovascular Risk Stratification*”, and the parameters are a mandatory part of this evaluation. Basic characteristics as age, smoking, diabetes mellitus, blood pressure, total cholesterol and fractions HDL and LDL can help define the risk of cardiovascular diseases as low, intermediate or high. This evaluation should be usually made since 40 years old and on, and the individuals with familial history of cardiovascular diseases must anticipate this approach in 10 years (2). Rest electrocardiogram, a noninvasive exam, easy to perform, may be proposed for asymptomatic men routinely, and echocardiogram must be reserved for hypertensive adults. Some exams, although popular, are not still fully validated and are not routinely indicated. For example, exercise testing, calcium score and carotid ultrasound are suggested by cardiologists for intermediate and high risk individuals (3).

It is also notorious based on the foregoing, that metabolic parameters significant role in the evaluation of adult man. Investigation of a potential glucose intolerance, for example, should begin at 45, repeated at intervals of one to three years. The dosage of



fasting blood glucose is critical in diagnosis, and glycated hemoglobin Suggested following the glyceemic control (4-6).

Also, metabolic parameters are important for the evaluation of adult men. Androgen Deficiency in Aging Males (ADAM), or adult hypogonadism, is often discussed in scientific meetings and in the press and is a recurrent topic in medical daily practice. The well documented annual lowering of total testosterone level, associated to elevation of SHBG, is better evaluated with the use of the calculation of Free Testosterone. The most reliable formula is the one proposed by Vermeulen et al (7, 8). But it is important to stress that androgenic evaluation is not routinely performed in adult men, only if there are symptoms that suggests it (7). And since some symptoms of androgen deficit are the same as presented by men with hypothyroidism, it is important to provide TSH and free T4 dosage for differential diagnosis (9).

All the above depicted evaluation is relevant, since those clinical and laboratorial parameters are directly related to several diseases, such as dyslipidemia, glucose intolerance, obesity, hypothyroidism and hypogonadism, that have common metabolic pathways.

The second main cause of death of men is tumor, so screening for these diseases is crucial. It is observed high levels of mortality due to lung cancer, followed by prostate cancer (the most prevalent in our country) and gastrointestinal tumors, according to the data of the Ministry of Health (10).

In order to detect early lung tumors, it is important to investigate smoking and to perform low dose radiation thorax computerized tomography, the ideal method for detection, although with high cost. This approach, although not completely endorsed by the medical societies, is indicated for asymptomatic adult males between 55 and 80 years old, with a history of smoking 30 packs-year and that still smokes or that quit along the last 15 years (11).

In relation to gastrointestinal system, the most important periodic evaluation is for bowel cancer. According to the recommendations of the National Institute of Cancer, it is important to provide faecal occult blood exam and colonoscopy every 10 years or less, according to risk, for patients with 50 or more years old (12, 13). On the other hand, endoscopy is only indicated by gastroenterologists for patients with symptoms or with history of familiar cancer.

At this point, being this a Urological journal, it would not be necessary to stress the importance of screening of early prostate cancer. But due the controversies published by the American Task Force and Guidelines of the American Urological Association, I decided to stress the guidelines of the Brazilian Society of Urology and Brazilian Medical Association that recommends annual evaluation of prostate to every man with 50 years of age or more, as long as life expectancy exceeds 10 years (14). It is mandatory to perform PSA dosage and digital rectal exam annually during periodic urological



exams. Urinary tract ultrasound, routinely performed by urologists, usually is expanded to total abdominal ultrasound. This non-invasive and low cost exam allows a thorough exam of intra-abdominal organs, important for global evaluation of men.

Several other exams and diagnostic tests can be ordered during initial or periodic evaluation of adult men, beyond the scope of this paper. Male population is getting older worldwide, and demands for more health care other than only genital and urinary. In 2010, the population of men with 40 or more years old was approximately 34 million and this number will double until 2050, according to the Brazilian Institute of Geography and Statistics (IBGE) (15). In the last 50 years, global life expectancy raised around 20 years, but from the 80s, life expectancy of Brazilian people surpassed world media, and today we have reached 74 years (15, 16). Basic sanitation programs, technological advances, development of new and more efficient drugs are the main sponsors of this achievement. However, when we divided life expectancy curves according to gender, there is a world favorable difference for women (16). Lower life expectancy of men may be due to historical and cultural barriers (for men to expose their eventual fragilities), alleged lack of time for consulting, or the fact that he judges himself as the home provider. It is also observed higher levels of morbidity and mortality of diseases that are potentially treatable. Men go to the doctor less frequently.

The concept of global attention to health allows for, once the initial barrier is transposed, the Urologist to provide total medical care for the male patient. Next decade will be recognized as the 4P Medicine: predictive, custom (personal), preventive and participant. These 4 Ps must represent how we doctors must act as providers of global and total attention to men's health.

“Research is Medicine became fully fragmented in specialties. If you see a doctor due to lung disease, he is not interested in your kidneys or in your heart.... So I think that most points must be reintegrated, beyond specialties... we will need more of the old times Medicine”
(Sidney Brenner – Nobel Prize of Medicine)



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