

## Somatotypes of patients with prostate adenoma

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### Abstract

Kind prostatic hyperplasia (BPH), likewise called prostate amplification, is a noncancerous increment in size of the prostate gland.[1] Symptoms may incorporate incessant pee, inconvenience beginning to pee, powerless stream, powerlessness to pee, or loss of bladder control.[1] Complications can incorporate urinary tract diseases, bladder stones, and interminable kidney problems.[2] The reason is unclear.[1] Risk factors incorporate a family ancestry, heftiness, type 2 diabetes, insufficient exercise, and erectile dysfunction.[1] Medications like pseudoephedrine, anticholinergics, and calcium channel blockers may decline symptoms.[2] The fundamental system includes the prostate pushing on the urethra consequently making it hard to pass pee out of the bladder.[1] Diagnosis is regularly founded on indications and assessment in the wake of precluding other conceivable causes.[2]

Treatment choices including way of life changes, prescriptions, various methodology, and surgery.[1][2] In those with mellow side effects weight reduction, work out, and diminishing caffeine admission is recommended.[2][4] In those with progressively huge side effects, meds may incorporate alpha blockers, for example, terazosin or 5 $\alpha$ -reductase inhibitors, for example, finasteride.[1] Surgical expulsion of some portion of the prostate might be completed in the individuals who don't improve with other measures.[2] Alternative medication, for example, saw palmetto, doesn't appear to help.[2] Around 105 million men are influenced globally.[3] BPH normally starts after the period of 40.[1] Half of guys over the age of 50 are affected.[2] After the age of 80 about 90% of guys are affected.[1] Although prostate explicit antigen levels might be raised in guys with BPH, the condition doesn't build the danger of prostate cancer.[5]

### Introduction

BPH is the most widely recognized reason for lower urinary tract side effects (LUTS), which are separated into capacity, voiding, and

side effects which happen after urination.[6] Storage indications incorporate the need to pee as often as possible, waking around evening time to pee, desperation (convincing need to void that can't be conceded), automatic pee, including automatic pee around evening time, or urge incontinence (pee release following a solid abrupt need to urinate).[7] Voiding manifestations incorporate urinary aversion (a deferral between attempting to pee and the stream really starting), irregularity (not continuous),[8] automatic interference of voiding, powerless urinary stream, stressing to void, a vibe of deficient exhausting, and wild spilling after the finish of urination.[9][10][11] These side effects might be joined by bladder agony or torment while peeing, called dysuria.[12] Bladder outlet block (BOO) can be brought about by BPH.[13] Symptoms are stomach torment, a nonstop sentiment of a full bladder, visit pee, intense urinary maintenance (failure to pee), torment during pee (dysuria), issues beginning pee (urinary aversion), slow pee stream, beginning and halting (urinary irregularity), and nocturia. BPH can be a dynamic sickness, particularly whenever left untreated. Deficient voiding brings about remaining pee or urinary balance, which can prompt an expanded danger of urinary tract infection.[14] Urgency. One of the most common diseases in men in the second period of adulthood, in elderly and old ages is "Benign prostatic hyperplasia (BPH)." Moreover, if at the age of about 40-49 years, it occurs in 11.3% of men, after 80 years it is found in 95.5% [7]. The etiology of prostate adenoma (BPH) exists in the form of hypotheses and it's in many respects controversial.

### Objective of the research

To build up the most widely recognized somatotype of patients with prostatic adenoma (PA) as per the list of Tanner and Rees-Eysenck body list.

Tasks

1. To carry out anthropometry
2. To compare the incidence of somatotypes identified by Tanner and ReesEysenck indices in the group of patients with PA and healthy men of the same age.

Materials and Methods

Materials

We inspected 150 patients with morphologically affirmed determination who were worked in the urology divisions of Krasnoyarsk medical clinics. The patients' age was 61-74 years (mean age 67, 7 ± 1, 3 ).

Methods

Standard anthropometry was made to all of them in 27 parameters [1-3] with the calculation of osteometric indices of Rees-Eysenck [3-4] and Tanner according to the known formulas [1-2, 6]. Anthropometric data taken from the healthy men of the same age were used as a comparison group [5]. Statistical data management was made using the Student's test and  $\chi^2$ . Differences were considered significant at  $p < 0.05$ .

Results

Determination of patient somatotype by Rees-Eysenck index showed that men of pyknic somatotype made up 47,4% (men of the population – 78,6%;  $P < 0,05$ ), normosthenic type -40,6% (13,9%;  $P < 0,05$ ), asthenic type - 12%(7,5%;  $P < 0,05$ ).When comparing the frequency of somatotypes among patients with PA and men of the population there is a significant difference.Patients with BPH are presented in the majority by pyknic and normosthenic types, while among men of the population the pyknic somatotype considerably prevails.

Data of these comparisons are shown on Figure 1.

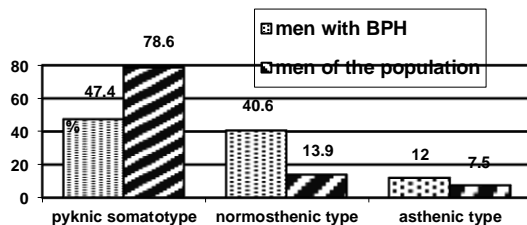
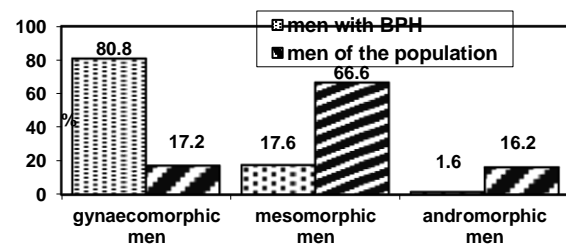


Fig.1. Comparison of the incidence of somatotypes by Rees-Eysenck index among patients with BPH and male population (% of the total number)

Discussions

While identifying patient somatotypes by the index of Tanner it was found out that gynaecomorphic men amount 80,8% (men of the population - 17,2%;  $P < 0,05$ ), mesomorphic ones - 17,6% (66,6%;  $P < 0,05$ ) and andromorphic group made up only 1,6% (16,2%;  $P < 0,05$ ). In comparison with the population values there are striking differences. Gynaecomorphic men are in the majority among the patients and as for the andromorphic men - they are almost absent Fig.2. Comparison of the incidence of somatotypes by Tanner index among patients with BPH and male population (% of the total number)



Conclusions

Hence

1. Among patients with BPH gynaecomorphic and mesomorphic groups are found predominantly. But gynaecomorphic somatotype is obviously dominating. Consequently, the balance of estrogen / androgen is of direct relevance to the etiology of the disease. We will dare to assume that PA is inherited in the same way, as expression of the gynaecomorphic features of the male constitution.

2. We state that male somatotype is directly related to the development of benign prostatic hyperplasia.

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