

**SOME DATA ON ARTERIAL HYPERTENSION (AH)
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The goal of this study was to assess effectiveness of various stages of AH treatment. 3240 teenagers (71.6% females and 29.4% males) aged 15 to 19 have been preliminary examined over 2 years (2002 and 2003). AH stage I was observed in 0.74% (70.8% females and 29.2 % males). These patients underwent the following two stage treatment: a) sedative phytomedicine and b) β -antagonists. The most effective remedy for antihypertensive therapy among teenagers was β -antagonists (propranolol or atenolol). Their administration was effective in all the cases.

Key words: arterial hypertension, out-patient hospital, pharmacoepidemiology, sedative phytomedicines, spasmolytics, β -antagonists.

Целью нашей работы являлось изучение эффективности различных этапов лечения артериальной гипертензии. 3240 подростков 15-19-летнего возраста (71.6% девушки и 29.4% юноши) наблюдались в течение 2-х лет (2002 и 2003 гг). Артериальная гипертензия I стадии диагностировалась у 0.74% подростков (70.8% девушки и 29.2 % юноши). Этим пациентам назначалось двухступенчатое лечение: а) седативные фитопрепараты и б) β -адреноблокаторы. Наиболее эффективным антигипертензивным лечением у подростков были именно β -адреноблокаторы (пропранолол или атенолол). Их назначение было эффективно во всех случаях.

Ключевые слова: артериальная гипертензия, поликлиника, фармакоэпидемиология, седативные фитопрепараты, спазмолитики, β -адреноблокаторы.

Introduction

As it is well known, hypertension is one of the most common cardiovascular diseases, emerged insidiously and often not revealed clinically until serious complications (target organ damage) have developed. Evidently, it is important from practical point of view to observe the hypertension in the earliest possible stage and try to reveal factors influencing on its development and course [1, 3]. So, to complete this objective it seems to be useful to assess hypertensive disturbances among teenagers. There is a lot of information about hypertensive disturbances among adult population, but the data about AH among teenagers are still incomplete [2, 4]. The goal of this study was to assess frequency and effectiveness of various stages of AH treatment.

Materials and Methods

We have examined all case reports of teenagers (aged 15 to 19) who resided in one of Grodno district (out-patient hospital № 1) during 2002 and 2003 years. 3240 teenagers have been observed (71, 6% females; 29,4% males).

Results and Discussion

Arterial hypertension (stage I) was diagnosed in 0.74% of the patients. This diagnosis was made in

70.8% females and in 29.2% males. Two stage treatment was performed in all these cases of AH. The first stage consisted of phyto sedative preparations and lifestyle modification recommendations in all the cases of hypertension. The latter is common practice in the world [7]. The most widely used plant preparations were Tinctura Valerianae and Tinctura Leonuri and more rarely used one (approximately 10 % of cases) was Tinctura Crataegi or Tinctura Paeonia. Their standard dosage was 20 drops t.i.d. The recommended duration of treatment course was about 2-4 weeks and these medications were administered to all the patients with AH. Additionally, physiotherapeutic procedures were prescribed for these patients, but it's well known traditionally negative attitude of teenagers to these procedures and, as consequence, bad adherence to all treatment schedule. Bad adherence may be the cause of therapeutic failure in some cases of AH [9]. The second stage of treatment consisted of beta-blocker prescription (propranolole, 20-40 mg b.i.d or t.i.d within 2 weeks). The first stage of AH treatment was successful in 76, 4% females and 57.1% males. The second stage of the treatment was effective in all remaining cases (i. e. in 11.8% females and 49.2% males) at the end of the first week of the treatment. Beta-blockers are currently one of the mainstay of AH

in teenager group [6, 7]. It seems that such treatment is very effective due to elevated sympathetic tone in teenagers [5]. We tried to analyze the questionnaires of the hypertensive patients with the questions about hypertension cases in patients' families and their attitude to tobacco smoking and alcohol consumptions as well. Family predisposition to hypertension was revealed in about 1/3 of all the cases. Tobacco smokers composed 53,3% of female patient group and 66,7% of male one. Alcohol consumption (except occasional beer drinking) was denied in questionnaires by all the patients. Furthermore, the obesity was noticed in 26,6% female patients and 33,3% male ones. It is a very important determinant for AH [7, 8, 10].

Conclusions

Due to these data we can make some conclusions:

1. Hypertensive disturbances are rather rarely developed in the group of teenagers and managed successfully by lifestyle modification and pharmacotherapeutics;
2. No sex differences in spreading AH were revealed;
3. β -blockers were very effective (it is preferable treatment), especially in male patients;
4. Tobacco smokers are the most common hypertensive patients.
5. Propaganda of healthy life style is rather reasonable and important for prophylaxis of hypertension.

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Резюме

НЕКОТОРЫЕ ДАННЫЕ ОБ АРТЕРИАЛЬНОЙ ГИПЕРТЕНЗИИ (АГ) У ПОДРОСТКОВ

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Мы изучили амбулаторные карты всех подростков 15-19 лет ($n = 3240$), которые жили в одном из районов г. Гродно в течение 2002 и 2003 гг. Артериальная гипертензия (АГ) первой стадии диагностирована у 0,74% подростков. Двухэтапное лечение проведено во всех случаях АГ: седативные растительные препараты наряду с советами по соответствующему изменению образа жизни и назначение бета-адреноблокаторов. Собирались также данные о наличии АГ у членов семьи и отношении пациентов к табакокурению и употреблению алкоголя. Сделаны следующие выводы: гипертензивные нарушения у подростков, в целом, редки, хорошо и быстро поддаются лечению с помощью изменения образа жизни и лекарственных средств, особенно β -адреноблокаторов. Связь между АГ и табакокурением диктует необходимость пропаганды здорового образа жизни.