Decreased ability/frequency to perform sexually was the most common symptom of hypogonadism among these men, reported by 55.8% ($P=0.014$ vs eugonadal group).

Men presenting to the primary care office with a history of hypertension have a higher crude prevalence of hypogonadism than men without a history of hypertension. The decrease in ability/frequency to perform sexually was statistically significant in hypogonadal versus eugonadal hypertensive men. Based on these results, it may be prudent to obtain blood testosterone concentrations in hypertensive men.

Key Words: Epidemiology, Hypertension, Hypogonadism

P-264
SECULAR TRENDS IN HEART RATE, BLOOD PRESSURE COMPONENTS AND HYPERTENSION PREVALENCE IN YOUNG ADULTS, 1949 TO 2004: ANALYSES OF CROSS-SECTIONAL STUDIES
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As few studies have comprehensively examined hemodynamic cardiovascular risk factors in youth, this study was designed to investigate the trends in blood pressure, pulse pressure, heart rate levels and hypertension prevalence in young adults between 1949 and 2004.

We studied 5,240 (55% male and 45% female) students who entered Queen’s University Belfast (QUB) as first year undergraduates between 1975 and 2004. These students comprised a 13% random sample of all students who entered university between 1975 and 1992, and a further 834 undergraduates (7%) who were randomly selected from all first year undergraduates who registered with University Health Centre from 2001-2004. Although original student records from 1949 to 1974 were destroyed, aggregate unadjusted findings from 1949-59 were available from previously published studies. Among students aged 16-24 we estimated the trend in mean heart rate, systolic and diastolic blood pressure and pulse pressure using linear regression analysis with year of entry as a categorical, and also as a continuous variable. $\chi^2$ test for trend was used to assess the change over time in the proportion of hypertensive (140/90 mm Hg) and normotensive individuals ($<140/90$ mm Hg).

The earlier observations showed that blood pressure, pulse pressure and heart rate declined between 1949 and 1959 in both sexes. After controlling for age, BMI, height, smoking and physical activity there was strong evidence to indicate that these declines continued to the late 1980s in males ($p<0.001$). These trends were also generally observed in female students although diastolic blood pressure remained stable over the period. These favourable downward trends reversed thereafter, showing a deleterious increase to 2004 ($p<0.001$). Hypertension prevalence showed a similar pattern, declining between 1949 and late 1980s, followed by a subsequent rise to 2004 in both sexes.

The decline in heart rate from 1949 observed in our study may account for some of the reduction in cardiovascular disease seen in the latter half of the 20th century. However the observed recent increase in these cardiovascular risk factors in young men and women is of concern and may have adverse implications for future patterns of cardiovascular disease.

Key Words: Cardiovascular Disease, Hemodynamics and Hypertension, Secular Trends

P-265
PREVALENCE OF TINNITUS IN A POPULATION OF HYPERTENSIVE PATIENTS REFERRING TO A HYPERTENSIVE CLINIC
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Background: Tinnitus is still a major clinical problem due to the difficulties concerning its etiology, pathogenesis and possibility to find an effective therapy. A previous epidemiology survey carried out in Italy showed that the prevalence of tinnitus in the general population is 14%. To our knowledge, no data are reported in the literature about the prevalence of tinnitus in the hypertensive population and its relationship with blood pressure (BP) values.

Objective of the Study: The aim of the present study was to evaluate the prevalence of tinnitus in a population of hypertensive patients referring to our Hypertensive Clinic.
Subjects and Methods: During a period of two months, 481 consecutive hypertensive patients underwent a questionnaire, which assessed characteristics, intensity, duration, and relationship between tinnitus and time of the day and seasons of the year.

Results: 100% of patients answered the questionnaire. Two hundred and eighty-five patients were male and 192 were female. Median age of the population was 61 years (range: 20 to 86 years). Eighty-four patients (17.6%) reported occasional or prolonged spontaneous tinnitus, whereas 397 subjects (82.4%) referred absence of tinnitus. There were no significant differences between the two groups of patients regarding as age, gender, diastolic BP values, and proportion of patients treated with more than one drugs for hypertension. Systolic BP was significantly lower in patients with tinnitus than in those without tinnitus. Moreover, tinnitus was more frequent in subjects with an adequate BP control (BP<140/90 mmHg) than in those without an adequate BP control (17.2% of male and 23% of female vs. 11.7% of male and 18.4% of female, p<0.01).

Conclusion: The preliminary results of this observational study suggest that in a selected hypertensive population the prevalence of tinnitus is slightly superior than in general population. Moreover, tinnitus seems to be more frequent in patients with BP values lower than 140/90 mmHg than in those with BP not well controlled by the therapy.

<table>
<thead>
<tr>
<th>No tinnitus (%)</th>
<th>Yes tinnitus (%)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>82.4</td>
<td>17.6</td>
<td>-</td>
</tr>
<tr>
<td>Male gender (%)</td>
<td>60.3</td>
<td>61.6</td>
</tr>
<tr>
<td>SBP (mmHg)</td>
<td>84.1</td>
<td>79.8</td>
</tr>
<tr>
<td>DBP (mmHg)</td>
<td>143.2 ± 11</td>
<td>140.6 ± 10</td>
</tr>
<tr>
<td># of patients with politherapy (%)</td>
<td>82.4</td>
<td>79.8</td>
</tr>
</tbody>
</table>

Key Words: Arterial hypertension, Prevalence, Tinnitus

P-267

RELATIONSHIP BETWEEN SLEEP APNEA SYNDROME, NOCTURNAL HYPERTENSION, MICROALBUMINURIA AND AORTIC STIFFNESS. A PROSPECTIVE STUDY

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Obstructive Sleep apnea (OSA) is prevalent in general population and seems to be a cause of resistant hypertension.

Objective: To assess the association between OSA and hypertension, aortic stiffness microalbuminuria and left ventricular hypertrophy.

Population and Methods: 40 patients consecutively referred to a cardio-respiratory sleep study (Autoset Sullivan) to OSA diagnosis. They were submitted to clinical and laboratory evaluation, ambulatory blood pressure monitoring (ABPM, Spacelabs), arterial distensibility study (Complior) and an echocardiography/Doppler study (HP, Sous).

Preliminary Results: In 33 pts OSA was confirmed (hypo/apnea >10/h), mean age 52±11, 24 (73%) males, BMI 39±11, office BP 148±18/84, hypo/apnea 40±21. Hypertension was present in 23 pts (70%), 60% on antihypertensive therapy. The majority of pts (88%) with OSA are non-dippers (91% in hypertensive). Although on antihypertensive therapy a large proportion of pts have non-control hypertension (40%) and a more severe OSA.

Any correlation was observed between the number of hypo/apnea/h office blood pressure (SBP, PWV, Microalbuminuria, LVMI) and microalbuminuria, pulse wave velocity, left ventricular mass index, office or ambulatory BP. In hypertensive pts a negative correlation was seen between BP control and the number of hypo/apnea (r =0.63, 0.001).

Conclusions: there is a strong link between OSA, hypertension and non-dipper status. Non control hypertension is well correlated with severe obstructive sleep apnea.

Key Words: Non-Dipper Status, Obstructive Sleep Apnea, Uncontrolled Hypertension