EPIDEMIOLOGICAL STUDY OF KLAIBYA IN HYPERTENSIVE PATIENTS

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ABSTRACT
Klaibya (Male Sexual dysfunction) is the most burning problem among the sexual diseases because in this condition the person is unable to perform the coitus due to complete or partial lack of erection and/or rigidity and if coitus attempted it ends into failure and dissatisfaction. The incidence of Klaibya is increasing day by day with increase in the incidence of diabetes, Hypertension, peripheral vascular disorders, peripheral neuropathy, anxiety, stress, depression and their medications.

Male sexual dysfunction is more prevalent in Hypertensive’s than Normotensive individuals, and several mechanisms have been implicated in the pathogenesis of sexual dysfunction in hypertensive patients. Sexual dysfunction represents a major quality-of-life related health problem, and available data indicate that Hypertension is a major risk factor for Klaibya (Male sexual dysfunction) in men.

In the present study, the survey was carried out on 1000 subjects of general society to access the prevalence of Klaibya with and without hypertension.

Key Words- Klaibya, Male Sexual dysfunction, IIEF-15, JNC-7

INTRODUCTION
Male Sexual Dysfunction or “Klaibya”1 can be defined as a “man’s inability to attain or maintain an erection of sufficient strength to perform the act of intercourse”2 “Patient should seek medical advice if this occurs consistently over 6 month period and in more than 50% of attempts”3. The basic aetiology behind this include psychological, neurological, vascular insufficiency, drug side effects as antihypertensive drugs, anti depressants drugs, diseases such as Diabetes Mellitus and others.

Sexual Dysfunction defined by the World Health Organization as “the various ways in which an individual is unable to participate in a sexual relationship as he or she would wish”4. As it is obvious, sexual dysfunction affects both men and women. Sexual dysfunction has been considered of psychogenic origin since ancient times; however, it is currently believed to be a disease of organic (mainly vascular) etiology in the majority of cases. Since atherosclerosis of the arteries supplying genital tissues greatly affects sexual function, it seems rational to assume that conditions predisposing to atherosclerosis (hypertension, diabetes, obesity, hyperlipidemias) might impair sexual function. Blood pressure is a major contributor in the atherosclerotic process and vascular and per vascular genital tissues exhibit profound damage with increasing blood pressure5.

Aims and objectives
This research work aimed to conduct an Epidemiological (Nidanatmak) study of Klaibya and establish the etiopathological significance of Hypertension in pathogenesis of Klaibya (Male sexual dysfunctions).

For this work, survey based case record form were prepared on the basis of compilations incorporating Dosha, Dushyadi factors as well as IIEF-15 and JNC-VII criteria. Survey was conducted at World Ayurvedic Congress Camp Banglore, National Institute Ayurveda Jaipur and Local camps outside Jaipur, where data was collected to find out the prevalence in general society.

MATERIALS AND METHODS
Inclusion criteria
- Adult male patients (above 18 years of age) suffering from Klaibya (Male Sexual Dysfunctions) with or without Hypertension (IIEF-156 and JNC-VII7).
- Adult male patients (above 18 years of age) suffering from Hypertension with or without Klaibya (Male Sexual Dysfunctions) (IIEF-15 and JNC-VII).

IIEF-15 Variables8

DOMAION 1-
Erectile Function in study population (n=1000).
Que no.1,2,3,4,5 and 15.
Que no 1- Frequency of erection during sexual activity
Que No 2-Frequency of erection hard enough for penetration
Que No 3- Frequency of able to penetrate (enter)
Que No 4- Frequency of maintain erection after penetrated (entered)
Que No 5- Frequency of maintain erection to completion of intercourse
Que No 15- Frequency of confidence that can get and keep erection

DOMAION 2-
Intercourse Satisfaction in study population (n=1000).
Que no.6,7, and 8.
Que No 6- how many times have attempted sexual intercourse
Que No 7- Frequency of satisfaction
Que No 8- Frequency of enjoyed sexual intercourse

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DOMAIN 3 -
Orgasmic Function in study population (n=1000).
Que no.9- Frequency of ejaculation
Que No 10- Frequency of feeling of orgasm or climax (with or without ejaculation

DOMAIN 4 -
Sexual Desire in study population (n=1000).
Que No 11- Frequency of sexual desire
Que No 12- Frequency of level of sexual desire

DOMAIN 5 -
Overall Satisfaction in study population (n=1000).
Que no. 13 and 14.
Que No 13- Frequency of satisfaction with overall sex life
Que No 14- Frequency of satisfaction with sexual relationship with partner.

RESULTS
Salient observations of Epidemiological study

**Table 1: Showing the prevalence of Klaibya and Hypertension in study population (n=1000)**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Condition</th>
<th>Number of subjects</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Klaibya</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Klaibya without Hypertension</td>
<td>392</td>
<td>39.2%</td>
</tr>
<tr>
<td></td>
<td>Klaibya with Hypertension</td>
<td>248</td>
<td>24.8%</td>
</tr>
<tr>
<td></td>
<td>Total Klaibya</td>
<td>640</td>
<td>64%</td>
</tr>
<tr>
<td></td>
<td>Hypertension</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hypertension without Klaibya</td>
<td>206</td>
<td>20.6%</td>
</tr>
<tr>
<td></td>
<td>Hypertension with Klaibya</td>
<td>248</td>
<td>24.8%</td>
</tr>
<tr>
<td></td>
<td>Total Hypertension</td>
<td>454</td>
<td>45.5%</td>
</tr>
<tr>
<td></td>
<td>People without Klaibya or Hypertension</td>
<td>154</td>
<td>15.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age Groups (Years)</th>
<th>People those who are affected by Klaibya or Hypertension</th>
<th>People those who are not affected by Klaibya or Hypertension</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 up to 30</td>
<td>Klaibya</td>
<td>Klaibya with Hypertension</td>
<td>Hypertension</td>
</tr>
<tr>
<td>18 up to 30</td>
<td>79</td>
<td>39</td>
<td>19</td>
</tr>
<tr>
<td>31 up to 43</td>
<td>172</td>
<td>92</td>
<td>48</td>
</tr>
<tr>
<td>44 up to 57</td>
<td>93</td>
<td>64</td>
<td>66</td>
</tr>
<tr>
<td>58 up to 70</td>
<td>48</td>
<td>53</td>
<td>73</td>
</tr>
<tr>
<td>Total</td>
<td>846</td>
<td>154</td>
<td>1000</td>
</tr>
</tbody>
</table>

**JNC –VII guidelines**

<table>
<thead>
<tr>
<th>Category</th>
<th>SBP mm/Hg</th>
<th>DBP mm/Hg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>&lt;120</td>
<td>&lt;80</td>
</tr>
<tr>
<td>Prehypertension</td>
<td>120–139</td>
<td>or 80–89</td>
</tr>
<tr>
<td>Hypertension, Stage 1</td>
<td>140–159</td>
<td>or 90–99</td>
</tr>
<tr>
<td>Hypertension, Stage 2</td>
<td>&gt;160</td>
<td>or &gt;100</td>
</tr>
</tbody>
</table>

**Exclusion Criteria**
- Female patients.
- Malignant Hypertension.
- Patients having mechanical cause of Klaibya (Male Sexual Dysfunctions) like Antisperm antibodies condition, Obstruction, Surgical process.

**Institutional Ethics Committee Permission**
As per provisions, before initiation of the project the protocol submitted to the ethics committee for approval.
The information and consent form also submitted to the ethics committee on the date 07-04-2010. The (CTRI) Clinical Trials Registry- India number for this trial is REF/2012/06/3686.

**Table 2: Age wise distribution of 1000 Subjects**

**Figure 1: Depicting the prevalence of Klaibya and Hypertension in a group of volunteers (n=1000)**
Figure 2: Depicting the Marital Status wise distribution (n= 1000)

Figure 3: Depicting the Education wise distribution (n=1000)

Figure 4: Depicting the Prevalence of Hypertension in study population (n=1000)

Figure 5: Depicting the Prevalence of Klaibya in study population (n=1000)

Figure 6: Depicting the Difference between self Assessment and IIEF-15 Assessment wise distribution

ANALYSIS OF IIEF-15 VARIABLES

Showing the prevalence of DOMAIN 1- Erectile Function in study population (n=1000). Que.no. 1, 2, 3, 4, 5 and 15

Figure 7: Depicting the Prevalence of DOMAIN 1 - Erectile Functioning in study population (n=1000)

Showing the prevalence of DOMAIN 2- Intercourse satisfaction in study population (n=1000). Que no. 6, 7, and 8

Figure 8: Depicting the Prevalence of DOMAINT 2 Intercourse satisfaction in study population (n=1000)
Showing the prevalence of DOMAIN 3- Orgasmic function in study population (n=1000). Que no. 9 and 10

Figure 9: Depicting the Prevalence of DOMAIN 3 Orgasmic functioning in study population (n=1000)

Showing the prevalence of DOMAIN 4- Sexual desire in study population (n=1000). Que no. 11 and 12

Figure 10: Depicting the Prevalence of DOMAIN 4 Sexual Desire in study population (n=1000)

Showing the prevalence of DOMAIN 5- Overall Satisfaction in study population (n=1000). Que no. 13 and 14

Figure 11: Depicting the Prevalence of DOMAIN 5 Overall Satisfaction in study population (n=1000)

DISCUSSION
In this Survey, study of Kliabia with or without Hypertension revealed that the prevalence of Kliabia and Hypertension in 1000 population, 64% suffered from Kliabia and 45 % suffered from Hypertension. Among 248 people two groups suffered from both Kliabia and hypertension, while only a meager 15.4 % (n=154) people were not affected by either Kliabia or hypertension.

In the prevalence of Domain-1 maximum number of people i.e. 344 suffer from Moderate dysfunction followed by 324 mild dysfunction, 173 were of sever dysfunction, 129 were of no dysfunction and 30 were of mild to moderate dysfunction.

In the prevalence of Domain -2 maximum number of people 264 suffered from no intercourse dissatisfaction followed by 229 moderate intercourse dissatisfaction, 224 were of mild intercourse dissatisfaction, 213 were of Mild to moderate intercourse dissatisfaction and 70 were of severe intercourse dissatisfaction.

In the prevalence of Domain -3 maximum number of people 268 suffered from mild dysfunction followed by 250 moderate dysfunction, 195 were of mild to, moderate dysfunction, 146 were of severe dysfunction and 141 were of no dysfunction.

In the prevalence of Domain -4 maximum number of people 259 suffer from Mild to moderate dysfunction followed by 252 mild dysfunction, 251 were of moderate dysfunction, 179 were of severe dysfunction and 59 were of no dysfunction.

In the prevalence of Domain - 5 maximum number of people 376 suffer from Mild to moderate dysfunction followed by 229 moderate dysfunctional, 228 were of mild dysfunction, 100 were of severe dysfunction and 67 were of no dysfunction.

SUMMARY
In this study a survey was conducted on 1000 volunteer as having symptoms related to Hypertension and Kliabia and result showed that significant number of people suffered from Kliabia (n = 640) while 454 people suffered with hypertension. In 248 people two groups suffered from both Kliabia and hypertension. Only a meager 15.4 % (n=154) people were not affected by either Kliabia or hypertension.
CONCLUSION
On the basis of survey based study we can conclude that Hypertension and Klaibya have strong relation with each other’s pathogenesis. In our study we found that person suffering from Klaibya were found to have Hypertension and the persons having Hypertension also suffered with Klaibya. Most of the person having Hypertension was not aware with Klaibya; it may be due to social stigma burden attached with this disease (Klaibya). They were found under the disease when using the IIEF-15 Variables. So on the basis of our study we can conclude that each patient of Hypertension should be examined for Klaibya.

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ABBREVIATIONS
MSD- Male Sexual Dysfunctions
SD- Sexual Dysfunctions
IIEF- International Index of Erectile Function
JNC- Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure
SBP: Systolic Blood Pressure
DBP: Diastolic Blood Pressure

REFERENCES

Cite this article as:

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