Comparative Study of Synergic Effects of Spasmo Proxyvon with Some food Items.

Department of Forensic Science, SHIATS

Abstract: Spasmo proxyvon tablet is a popular antispasmodic drug and is covered under Narcotic Drugs. It is increasingly being abused for its opioid effect due to easily available. Recently, it has been been made cocktail with different food product to get stronger its effect. The present study was aimed to evaluate the type of food/beverage being use as cocktail with S.P.drug. In this study, tea, coffee, sweets and cigarette have been taken as enhancer of S.P drugs and Survey data were taken from 150 drug addicted volunteers. 97 drugs abuser consumed tea, 9 drug abuser used coffee. Sweets as cocktail using drug abusers were 6 in number. 14 drug abusers used cigarettes as drug enhancer. Numbers of drug abusers who used combination food items i.e. Tea and sweets, tea and cigarettes, coffee and cigarettes, sweets and cigarettes as drugs affect enhancer are 8, 11, 3, 2 respectively. Percentage of number of persons who used tea, coffee, sweets, cigarettes, tea & cigarettes, coffee & cigarettes, sweets & cigarettes as cocktail with drug Spasmo proxyvon were 64.67%, 6%, 4%, 9.33%, 5.33%, 7.33%, 2% and 1.33% respectively. Consuming of tea as cocktail was strongest effect of drug. Biochemistry of this drug inside our body in this area is needed to be investigated.

Keyword: Spasmo Proxyvon, Dextropropoxyphene, Caffeine, Tea

I. Introduction

Spasmo-Proxyvon is a popular antispasmodic drug from Wockhardt that is increasingly being abused of late. These drugs are covered by the Narcotic Drugs and Psychotropic Substances Act; there has been a recent trend towards abuse of pharmaceutical agent such as pentazocine, propoxyphene and buprenorphine. It contains paracetamol (acetamini-nophen), dicyclomine, and dextropropoxyphene. This combined drug formulation sold as gelatin capsules is easily available, and is increasingly being abused for its opioid effect. Composition of Spasmo Proxyvon

<table>
<thead>
<tr>
<th>API</th>
<th>Quantity</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaminophen</td>
<td>400 mg</td>
<td>400 mg</td>
</tr>
<tr>
<td>Dextropropoxyphene</td>
<td>65 mg</td>
<td>65 mg</td>
</tr>
<tr>
<td>Dicyclomine (Dicycloverine)</td>
<td>10 mg</td>
<td>10 mg</td>
</tr>
</tbody>
</table>

Dextropropoxyphene is classified as an opioid analgesic and is used to treat mild to moderate pain. It can be used to ease pain before, during and after an operation. It is often combined with Acetaminophen and sold in several countries (note: in some countries, compounds containing Dextropropoxyphene are available only with a valid doctor’s prescription). Dextropropoxyphene is derived from a much stronger opiate agonist called Methadone. It is approximately 1/2 to 2/3 as potent as Codeine. In the United States, Dextropropoxyphene HCI is available as a prescription with Acetaminophen in ratio anywhere from 30 mg/600 mg to 60 mg, 325. Mg respectively. These are usually named “Darvocet,” “Darvin,” or “Darvon.” In Australia, dextropropoxyphene is available on prescription, both as a combined product (32.5 mg dextropropoxyphene per 325 mg acetaminophen) known as either “Di-gesic”, “Capadex”, or “Paradex” and in pure form (100 mg capsules) known as “Doloxene”. Dextropropoxyphene is marketed in Europe as “Abalgin” amongst other names.

The maximum doses for the constituents of Spasmo Proxyvon (constituents shown above) are as follows:
Acetaminophen: 2-4 grams/day
Dextropropoxyphene HCI: 390 mg/day
Dextropropoxyphene Napsylate: 600 mg/day
Dicyclomine: No available safety data for dose above 80 mg/day

Dextropropoxyphene (DPP) has a 1/2 life of 6 to 12 hours. However, its metabolite, norpropoxyphene (NPP) has a 1/2 life of 30 to 36 hours. After oral ingestion, onset of effects is usually 1 hour, with peak plasma concentrations achieved within 2 - 21/2 hours. Repeated doses (at intervals of 6 hrs.), lead to increasing in plasma concentrations, eventually reaching a plateau at/after the 9th dose (at 48 hrs.). It is worth knowing that due to extensive first-pass metabolism of DPP, the plasma concentrations after a single dose may be four times lower than those found in steady state (achieved with regular dosing at 6 hr. intervals). Also, with repeated dosing, it takes longer for the metabolite to be eliminated. On the whole, the metabolism of DPP takes a lot
Comparative study of synergic effects of Spasmo proxyvon with some food items.

longer than that of morphine. Epigastric distress, nausea, rashes; leucopenia is rare, acute renal tubular necrosis. Very rare, blood dyscrasias, Constipation, Itching, Drowsiness, Sore throat, Impaired alertness, Confusion, Serious or fatal heart rhythm, Dry mouth, nausea, vomiting, constipation, bloated feeling, abdominal pain, loss of taste and appetite. Dizziness, Blurred vision, Rash, hives, Decreased sweating, nasal stuffiness or congestion, sneezing, throat congestion, impotence and suppression of milk secretion are side effect of Spasmo Proxyvon

1.1 Scenario In Manipur
Drug addiction or abuse is a global problem. No Country is free it. Hundreds and Thousands of young men and girls are today victims of the evils and curls of drugs addiction. The worst form of drug addiction or abuse is Spasmo proxyvon. There are innumerable causes for drug addiction. Some of them are Socio-economic condition and environment, psycho physical behavior problem including frustration, indiscipline acts, personality disintegration, low mentality, handicapped, anxiety, tension, conflicts, psycho neuroses etc. Using of drugs after starts out of Curiosity or to have pleasant enjoyment. People are generally induced to drug addiction through their friends or peer groups. Oftentimes these are initially taken to overcome boredom, depression and fatigue. Parental negligence, frustration in life, broken family unemployment may also lead to the initial use of drugs and thereafter its easy availability makes the user dependent on it.

1.2 Tea
Tea has caffeine. Caffeine is a mild stimulant. High doses can make someone feel jittery or on edge and may prevent sleep. Very large doses may cause flashes of light or odd noises. As with other stimulants, the greater the high, the greater the fall. It also can increase heart rate and blood pressure, is a weak diuretic (encourages urine formation) and increases the respiratory rate. It also can cause overdoses in high amounts and almost became illegal when marijuana, cocaine, peyote etc…. became illegal. By the way there is no nicotine in tea what so ever. However it does have tannin. Interestingly, both tannin and caffeine are listed as carcinogens by the IARC, part of the World Health Organization but no warning signs on packages or age limits.
Sweets, tea, coffee, cigarette are generally used as cocktails with drugs (S.P) by the youngster in peer group. so I pick up these 4 items.

1.3 Objective: To find out the enhance effect of Spasmo proxyvon drugs cocktail with food product.

II. Methodology of the study
The proposed study was conducted in the various drug de-addiction and rehabilitation centers in Manipur. The method to be adopted in the study will be “Normative Survey Method”. Under this method, the quantitative and qualitative data are also required to collect and dealt with for achieving the objectives of the study.

2.1 Population and sample: In the present study 150 S.P. drug addicted persons were covered as sample of the study. Subjects of this study were from rehabilitation centers as well as from those drugs addicted persons who are not register in rehabilitation centers.

2.2 TOOLS USED: The required tools which were used in the study:
2.2.1 Observation: The investigator adopted an observation as a tool for surveying the location that en
ables to assess the subjects who are registered there as well as those addicted persons who are in under population.

Following Parameters of study were to be taken after observation:
Types of food/beverage/cigarette use to drink/eat after taking S.P. capsule to enhance the effect
(a) Tea
(b) Coffee
(c) Sweets
(d) Cigarette
(e) Tea & sweets
(f) Tea & Cigarettes
(g) Coffee & cigarettes
(h) Sweets & cigarettes

III. Result and Discussion
3.1 Analysis data
It has been taken the items and combination of items which are generally used by the drugs abuser to enhance the drugs effect as well as to get kick faster. In total 150 drug addicted persons, 97 drug abusers were habit to drink tea.9 drug abusers used coffee as cocktail of drugs. Sweets as cocktail using drug abusers were 6 in number.14 drug abusers used cigarettes as drug enhancer. Numbers of drug abusers who used combination
Comparative study of synergic effects of Spasmo proxyvon with some food items.

food items i.e. Tea and sweets, tea and cigarettes, coffee and cigarettes, sweets and cigarettes as drugs affect enhancer are 8, 11, 3, 2 respectively. Percentage of number of persons who used tea, coffee, sweets, cigarettes, tea & cigarettes, coffee & cigarettes, sweets & cigarettes as cocktail with drug Spasmo proxyvon were 64.67%, 6%, 4%, 9.33%, 5.33%, 7.33%, 2% and 1.33% respectively.

Table 1. Showing Percentage number of persons who consume different items:

<table>
<thead>
<tr>
<th>Sl.no</th>
<th>Food/beverage/cigarettes</th>
<th>Number of persons</th>
<th>Percentage number of persons who consume different items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tea</td>
<td>97</td>
<td>64.67%</td>
</tr>
<tr>
<td>2</td>
<td>coffee</td>
<td>9</td>
<td>6%</td>
</tr>
<tr>
<td>3</td>
<td>sweets</td>
<td>6</td>
<td>4%</td>
</tr>
<tr>
<td>4</td>
<td>cigarettes</td>
<td>14</td>
<td>9.33%</td>
</tr>
<tr>
<td>5</td>
<td>Tea &amp; sweets</td>
<td>8</td>
<td>5.33%</td>
</tr>
<tr>
<td>6</td>
<td>Tea &amp; Cigarettes</td>
<td>11</td>
<td>7.33%</td>
</tr>
<tr>
<td>7</td>
<td>Coffee &amp; cigarettes</td>
<td>3</td>
<td>2%</td>
</tr>
<tr>
<td>8</td>
<td>Sweets &amp; cigarettes</td>
<td>2</td>
<td>1.33%</td>
</tr>
<tr>
<td>Total numbers of persons</td>
<td>150</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fig.1. Commonly consumed items along with Spasmo proxyvon Drug in % (N=150)

From the Fig 1, graph it was noticed that number of tea consuming abuser has highest rate i.e. 64.67% and number of cigarette & sweet consuming abuser has lowest rate i.e. 1.33%.

3.2 Discussion

Spasmo-Proxyvon is indicated for the relief of spasmodic pains due to renal colic, abdominal muscle cramps, irritable bowel syndrome, and etc. Spasmo-Proxyvon costs less than Rs.12 for each strip. Just three tablets dissolved in soda water gives the user the desired euphoria, which lasts for more than three hours. The effect is said to be stronger when it is dis-solved in soft drinks. Tolerance develops in the user over a period of time, which ends up using the drug in higher doses than usual, eventually leading to fatality. Some-times the drug user dissolves the capsule in water and injects it intravenously, not knowing that the napsylate form of propoxyphene is water-insoluble and settles under the veins causing gangrene due to vascular compromise. Each “shot” is made from four to six capsules. Unlike heroin, the effect of each shot lasts three minutes, making an addict take a dozen shots a day. People are generally induced to drug addiction through their friends or peer groups. Most of Drug addicted persons generally take the drugs (S.P) and tea to make stronger the effect of drug in their body. Tea is one of their favorite beverages to make cocktail with S.P. According to data; tea is highest percentage of using as cocktail by drug abuser due to easy available and cheaper comparing to other beverage. One can easy effort a cup of tea. Moreover, Tea has caffeine. Caffeine is a mild stimulant. High doses can make someone feel jittery or on edge and may prevent sleep. Cocktail with tea makes faster to get kick on their body comparing with using only S.P. S.P drug abusers choose tea as cocktail with S.P because of these reasons. But, it has not been being studied what makes tea component combination with S.P component inside our body results strong effect so far. It is necessary to concentrate more on this area for further study. With the realization of these problems, the governments should implement more strengthen measures to prevent easy accessibility.

IV. Conclusion

The result of this study documented that consuming of tea as cocktail was strongest effect of drug (Spasmo proxyvon). Smoking after taking drug was lower and using sweet & cigarettes after taking drug was least effect of this particular drug. Considering the present Scenario of the issues relating drugs, it is deserved to do further study as well as it is the high time to have various drug policy program for the sustainibility of the society.
Comparative study of synergic effects of Spasmo proxyvon with some food items.

Reference


[3] Current awareness in drug testing and analysis. Published online in Wiley InterScience (2010)


[10] Swaroopa Rani N. Gupta; Polarographic Determination of Paracetamol in Pharmaceutical Preparations Using 0.008% Gelatin and 0.1 M HClO4; 3rd International Conference on Environment, Chemistry and Biology, Vol.78: 15 (2014)


