Pharmacovigilance of Rasakarpura

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Pharmacovigilance

Pharmakon (Greek) = drug

Vigilare (Latin) = to keep watch, awake, alert

A System to Monitor the Safety and Efficacy of Medicines is known as Pharmacovigilance
A drug will be harm full as that of a poison, as weapon or as fire or thunder, if not understood properly or if administered improperly.

It emphasizes on attaining complete knowledge of a drug prior to its administration.
• **Adverse drug reaction** (ADR) is an injury caused by taking a medication. ADRs may occur following a single dose or prolonged administration of a drug or result from the combination of two or more drugs.

• In case of Metals / Minerals / Poisonous drugs, probable toxic Symptoms and their management etc. have been found elaborately explained.
• Continuous use of Gandhaka Rahita Murchchita Parada may cause serious untoward effects.

• Rasakarpura is one type of Nirgandh murchchana.

• Rasakarpura has been mentioned with lots of utilities, but when it is used in larger dosage, it acts as Vishavat (Parada visha lakshana).
• Rasakarpura is a very toxic drug hence if it is not prepared properly and/or used in higher dose it is likely to cause serious toxic effects.
• Rasakarpura

- Parada
- Conc Sulpuric acid
- Saindhav Lavana
• Chemically identify as

Mercuric chloride along with trace elements
Mercury toxicity

Acute toxicity
- Tastelessness
- Burning sensation in thorax
- Nausea and vomiting
- Hematemesis
- Dysurea
- Perspiration
- Convulsion
- Abdominal pain
- Gingivitis
- Death

Chronic Toxicity
- Abdominal pain
- Nausea and vomiting
- Gingivitis
- Blue line on gingiva
- Dyspnoea
- Hemoptysis
- Convulsions
- Fever
- Weakness
- Death

Vapour Toxicity
- Excessive salivation
- Gingivitis
- Incompact tooth
- Foul smell of exhaled air
Topical Toxicity

• **Symptoms in children:** Marked swelling, erythema of the extremities, sweating, itching.
• **Symptoms in adults:** Fever and various types of skin rashes.
Toxicity of mercuric chloride

• The potential to produce toxicity exists even when it is administered in combination in compound preparations. It is reported to produce effects like severe vomiting, retro-sternal burning, burning sensation in stomach, abdominal pain etc.
## Toxic effect of drugs in Rats

<table>
<thead>
<tr>
<th>Organ</th>
<th>Control</th>
<th>RK (5 TED)</th>
<th>MC (5 TED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart</td>
<td>Normal</td>
<td>Mild myocarditis</td>
<td>Severe myocarditis</td>
</tr>
<tr>
<td>Liver</td>
<td>Normal</td>
<td>Mod Fatty Changes</td>
<td>Necrosis/macro Fatty Changes</td>
</tr>
<tr>
<td>Kidney</td>
<td>Normal</td>
<td>Normal/mod Fatty Changes</td>
<td>Fatty Changes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Necrosis/Fatty Changes</td>
</tr>
</tbody>
</table>
• Rasakarpura is used in the diseases like dysentery, skin diseases, syphilis etc., and also as an immunomodulator.

• Clinical trial of Rasakarpura Drava and Rasakarpura Gel was done on the patient of Kshudra Kustha.

Registered patient

<table>
<thead>
<tr>
<th>Group</th>
<th>Completed Course</th>
<th>Discontinue</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rasakarpura Drava</td>
<td>60</td>
<td>07</td>
<td>67</td>
</tr>
<tr>
<td>Rasakarpura Gel</td>
<td>60</td>
<td>06</td>
<td>66</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
<td><strong>13</strong></td>
<td><strong>133</strong></td>
</tr>
</tbody>
</table>
Unwanted Effect:

• During clinical trials, 2 patients (one from each group) complained of severe burning sensation, oedema and pain after drug application.
Treatment of ADR symptoms of Rasakarpura:

- Stop the application of Rasakarpura Drava or Rasakarpura Gel
- Use of Diuretic drugs
  - eg Punarnavastak Kwath
- Gandhak Rasayana
- Manjisthdi Kwath
- Local antibiotic drugs
  - eg Panchvalkal Kwath along with Tankan

Pathya: Dugdha with Ghrut, Tandula with Dadhi and Kakaradi gana
Under the contraindicated items, the “Kakkaradi Gana” is very famous which includes–

<table>
<thead>
<tr>
<th>Kushmanda</th>
<th>Kamatha (Kachhapa)</th>
<th>Kalinga Phala</th>
<th>Kola</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kulattha</td>
<td>Kusumbha Pushpa</td>
<td>Karkoti</td>
<td>Kataka</td>
</tr>
</tbody>
</table>

Kakkaradi Gana causes quick excretion of Parada through the urine, stool and such the maximum benefit of the Parada administration can not be achieved.
Conclusion

• Rasakarpura and all the medicines should be used without hesitation but carefully.
Thank you...