AYURVEDIC METHODS OF SEMEN ANALYSIS.

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**Manuscript Info**

**Abstract**

A detailed description of examination of the seminal fluid is available in the Ayurvedic classics. It is in common practice to use the terms retas, sukra, and virya to be vaguely synonymous. However, these words are coined for a specific purpose; that is to say, shukra denotes the whole testicular secretion comprising of sperms and androgens; while retas denote the ejaculate and Virya, the androgens. The examination of retas (semen) has been explained by Charak under eight factors, where as Sushruta has described different pathological conditions of semen (ref. table). All the Dusti laxanas helps us to analysis of Semen.

**Introduction:-**

According to Acharya Charaka there are eight factors of semen which has to be examined. They are as follows

- Phenila
- Puti
- Tanu
- Picchila
- Ruksha
- Anya dhatu samsrusta;
- Vivarva
- Avasadi.

**PHENILA** : phenila means frothy or that which contains froth. Froth is formed when surface tension is lowered. Surfactants are responsible for lowering of the surface tension. Surfactants, when present in the semen, destroy the sperm structural membrane and hence sperms die due to leakage of internal organelles. It may be said that one may ascertain the presence of surfactants in semen by quantifying the froth.

**TANU** : Tanu means thin. Thinness/thickness or translucency of the semen is dependent on its sperm concentration. The greater the sperm count, more the density. So by determining the sperm count, one may ascertain the tanutva.

**RUKSHA** : Ruksha means dryness; sushruta says that it is ascertained by direct observation (su.sa.sha.41/15) Hemadri, while commenting on A,Hr.1/18 says “ruksha is that guna which causes dryness”. It is difficult to demonstrate dryness physically in liquid, but it may be demonstrated pharmacologically. For example action of kerosene, alkalis or detergents etc., presence of etc. produce dryness over body parts. This is to
that, if semen attains such property, it exerts high osmotic pressure on sperms and thus disturbs the function of sperms. On the basis of this increased alkalinity of semen (pH >8.5) can be taken as Ruksha Retodusti.

- **VIVARNA**: the normal colour of semen is said to be sphaṭikabha (i.e. Alum). This is grayish white. Any deviation from this is said to be vivarana. The pathological color are said to be Aruna (raddish), kṛishna (blackish), pittā (yellowish) and shukla (milky white).
- **PICCHILA**: this refers to stickness or viscosity (su.sa.sha. 41/15) Sushruta says that it can be ascertained by observation and touch. The picchilata of Retas may be graded by measuring the viscosity of semen sample. Measuring the thread formed while glass rod is touched or while dropping the semen from the dropper achieves the purpose.
- **PUTI**: puti refers to putrid smell. Any semen sample giving offensive or putrifiactory smell may be considered putigandha. Generally putigandha of retas may be seen in chronic suppurative conditions of genital track or psychospermic or infected semen samples.
- **ANYA DHATU SAMSRTA**: presence of non spermatozoa cells [gelatinous bodies, mucous threads, macrophages, epithelial cells etc.] in the semen can be considered as anya dhatu samsrsta. Among the above said, gelatinous body can be seen in the semen physically. Anti sperm antibodies may be formed by agglutination, which in turn may be present as head to head, mid piece to mid piece or on non specific on weight drop slide or on pap smear.
- **AVASADI**: avasadi means the property of sedimentation. Some unliquified or partially liquefied shows sedimentation. In normal conditions, the semen should mixed with distilled water and turn the color to whitish. In certain conditions, the semen drop won’t disperse and sinks the bottom, and no discoloration of water occurs. Such samples may be called as avasadi.

**Discussion:**

The first three doshas i.e. phenila, tanu and ruksha are caused when vata gets vitiated which in turn vitiates the retas. This type of gets ejaculated with difficulty and is very less in volume and is incapable of producing an offspring.(ca. sa. Cī.30/141).

The next two doshas i.e. putigandha and vivarana, are by vitiation of sukra / retas by the vitiated pitta. This retas causes burning sensation on ejaculation is hot to touch. The picchila dosha is caused by kapha affecting the retas. Injury to shukravaha stroatas due to excessive sexual activity, trauma etc. will cause the condition of putishukra. (ibid)

Due to vegasandharana vitiated vayu blocks the path of retas, it ejaculated with difficulty this is the avasadi dosha of retas. These doshas of retas or shukra dosha causes disease oe of which is klaibya.

The following table indicates the shukra dosha according to charaka and sushruta

<table>
<thead>
<tr>
<th>CHARAK</th>
<th>SHUKRADUSHTI</th>
<th>SUSHRUTA</th>
<th>SHUKRADUSHTI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. vata</td>
<td>Phenila</td>
<td>1. vata</td>
<td>Vataja</td>
</tr>
<tr>
<td>2. vata</td>
<td>Tanu</td>
<td>2. pitta</td>
<td>Pīttaja</td>
</tr>
<tr>
<td>3. vata</td>
<td>Ruksha</td>
<td>3. kapha</td>
<td>Kaphaja</td>
</tr>
<tr>
<td>4. pitta</td>
<td>Vivarana</td>
<td>4. rākta</td>
<td>Kunappanghi</td>
</tr>
<tr>
<td>5. pitta</td>
<td>Puti</td>
<td>5. sleshmavata</td>
<td>Granthibhuta</td>
</tr>
<tr>
<td>6. kapha</td>
<td>Picchila</td>
<td>6. pittasleshma</td>
<td>Putipuya</td>
</tr>
<tr>
<td>7. rākta &amp; etc.</td>
<td>Anya dhatu samsrsta</td>
<td>7. pittavata</td>
<td>Kshina</td>
</tr>
<tr>
<td>8. vatakapha</td>
<td>Avasadi</td>
<td>8. sannipata</td>
<td>Mitra purishagandhi</td>
</tr>
</tbody>
</table>

*(ca. sa. Sī. 30/193, su.sa.sha.2/4)*

**Conclusion:**

It is very important to examine the semen on the basis of shukra dushti this will help in the specific drug selection on the doshas involved in the pathogenesis. This will result in better out come in the management infertility.