

उपधातु

secondary tissue

निरुक्ती → उपसादृश्ये । अर्थात्सादृश्ये ।  
धातुः ।

one which is similar to dhātu.

Definition :-

धातुकृतञ्च उपजायन्ते इति उपधातवः

one which is formed from dhātu is called उपधातु .

इमान् शब्दो लो इति असृजः कण्ठराशि  
मीलान् वसा लक्ष घृ च मेढसः श्नाथुसंग्रहः ।

क्र.सं.	धातु	उपधातु
१)	इमधातु	शब्द, शज (मार्तव)
२)	इल्ल " "	सिरा, कण्ठरा .
३)	मील " "	वसा, लक्ष
४)	मेढ " "	श्नाथु
५)	आश्वि " "	दंत
६)	गण्डा	कण्ठ
७)	शुक्	शोष

## शतलज (breast milk)

शतलज is the quality of शतलज one which gets secreted only in female breasts immediately after the delivery of baby.

Definition: शतलज जातो इति शतलजः ।  
शतलजं दहीरं शतलजं कथयन्ति ।

For the nourishment of baby, the milk which is secreted in the breast is called as शतलज.

Synonyms: पशुस्य, दुग्ध, दहीर, गौरस्य.

Site of शतलजशतलजः :-

Breast शतलज is the site of शतलजशतलजः.

शतलज is formed in breast and expelled out from the nipple.

Formation of शतलज (breast milk) :-

शतलज is the quality of शतलज शतलज is formed from आहारस्य शतलज circulates in the whole body.

When suckling reaches breast, reflex is formed from the sweetness of suckling.

due to touch, sight or even thought of child stimulates secretion of breast milk.

on the first & second day of delivery, breasts secrete thick, heavy, yellowish fluid is called

'पिशुव' and from 3<sup>rd</sup> day actual milk is secreted.

अंजली प्रमाण →

volume of it is considered as 2 अंजली.

दो अंजली लु स्तनोत्पत्त्ये ।

Importance

मानुष्ये भवति पिबेत् स्तनं तत्पश्ये  
देहवृद्धये ।

All infants should be fed on breast.  
it enhances the growth of body,  
it provides immunity to  
the baby.

Properties : →

स्वादु - sweet

शीत - cool in nature

white - colour

शुद्ध - oily शरीर का

सहज - light, easy to digest.

Normal breast milk easily dissolves with water.

Functions :-

1) It gives vibrant life

" " " " nourish the body

It is शुद्ध - easily digest

It is produced from the digested food of mother so it contains all the nutrients

It increase the immunity,

It is the complete food for baby for first 6 months it is necessary for child.

## रज or आर्तव

It is a कथिद्यालु of रसिधौतु -  
Definition :-

रसानु भुव स्थियां रक्तं रजः संसंप्रवर्तते ।  
तत्र वर्षति दादशान उर्वं याति पंचशतः क्षयम् ॥

रज is the secondary tissue of एकाधकतु.

Regular production of रज indicates well functioning of female reproductive system.

पर्यायनामः रज & आर्तव these synonyms.

आर्तव - रक्तो भवति इति आर्तव ।

आर्तव means ovum which is responsible for fertilization. 'शुक्ल' means time or period. The time in which आर्तव (ovum) matures is called as 'शुक्लकाल'.

The factor one which is produced in 'शुक्लकाल' is called as आर्तव.

रज :- मासि मासि रजः स्त्रीणां रसजं संप्रवर्तते त्र्यहं ।  
वत्सशतं दादशान उर्वं याति पंचशतं क्षयम् ।

Bleeding from vagina for three days every month is called 'रज'. And this period is called रजकाल or शुक्लकाल or menses.

Menses start in the female at the

age of 12 and ceases stops at the age of 50 years. It is a constituent which is excreted during menstrual phase of menstrual cycle.

Definition of Ovary (ovum) →

स्त्रीलक्षणं आर्तुं गर्भकृतं च ।  
स्त्रीणां शुक्रं न गर्भाय । अवेत गर्भाय  
च आर्तुं ।

In female ovary is responsible for fertilization.

पांचभौतिक संघटन of आर्तु →  
आर्तुं तु आग्नेयम् ।

In ovary there is a predominance of lepa bhadrata.

Formation of Ovary →

एव मासेनरसः शुक्रं स्त्रीणां च आर्तुं भवति ।

In females, it takes one month to form ovary from rasabala.

शुप्लुकाकं →

Exact period of fertilization is called as shuplukaaka or rasabala.

The first 12 nights after the

Cessation of menstrual flow are considered as अनुकूल.

Site of आर्तव → आर्तववहने वाला नली का अंतःस्थान: आर्तववहने वाला स्थान: ।

आर्तववहनेवाला नली is the site of आर्तव. And roots of आर्तववहनेवाला नली are uterus (गर्भाशय) and tube (आर्तववहनी) conducting utero.

Concept of रज → It is the byproduct of रजस्रव. Appearance of Healthy (Raj) रज: →

शुद्धासुर्क रजस्रव तत वा लाक्षा रजस्रव ।  
तद् आर्तव प्रशंसति यत वा मो न विरंजयेत्

colour of आर्तव is red like blood of hare (or rabbit). It leaves no stain (रज) on the clothes and can be washed easily.

Volume प्रमाण of रज →

शुद्धासुर्क रजस्रव: औजस्यश्चत्वारः ।  
प्रमाण of रज is 4 औजस्य

Functions of रज →

In pregnant woman, due to growing fetus, menstrual cycle stops.

the 2nd then forms placenta and it helps in breast development of mother.

Disorders of अर्त्वा: → 2 types रोगी & अशुभकारिणी

अर्त्वावृद्धी लक्षण → ① अतिशक्ति of र्वा  
means excess bleeding per vagina i.e. menorrhagea.

2) bodyache

3) foul smelling of menstrual flow etc.

अर्त्वाक्षय लक्षण →

- ① It produces irregular menses,
- 2) oligomenorrhoea,
- 3) dysmenorrhoea

Effects of menstrual cycle on female body: →

① र्वा enhances growth of organs of female reproductive system.

② It stimulates growth of secondary sex character, i.e. development of breast.

Factors responsible for regular menstrual cycle: → ① Healthy female

reproductive system - it includes ovary uterus, tube and vagina.



- 2) Proper formation of sterols.
- 3) Proper functioning of steroid.
- 4) Proper diet & regimen.

वृष्याणु of शरणाणु

सिरा

Definition of सिरा →  
शरणाणु सिरा: ।

Siras are hollow structures which originate from the heart.

Siras conduct रसा and रक्तद्रव्य in the body.

Formation of सिरा →

Siras are formed from the सन्धि of मेदधाणु. Due to शृङ्खला.

Number of सिरा: → 700 सरास in the body

Functions of सिरा :-

- ① To conduct रसा & रक्तद्रव्य.
- ② To conduct nutrients to tissues
- & ③ To conduct शरीरानु O<sub>2</sub> to the tissues.

Types of सरास : → 4 types

- ① शरीर सिरा
- ② शरीर " "
- ③ शरीर " "
- ④ शरीर " "

Disorders of सरास सरास are the बुध्दुणु

of 2011. So disorders of 2011  
affect on 2011

e.g. <sup>due to</sup> 2011 - 2011 means  
enlargement of blood vessels is seen

→ In 2011 - collapsing (2011)  
of blood vessels is seen.

4)

कण्डरा  
कण्डरा is the उपधातु of शनधातु  
Kandara is the type of वृत्तान्तु (चक्रान्तु)  
(शनधातु) which are large and long.

वृत्तान्तु कण्डराः ।  
महाशनधातु कण्डरा इति संज्ञा .

Numbers of कण्डराः →

16 Kandaras are in the body.  
Four कण्डरा in lower extremities .  
4 कण्डरा in upper extremities .  
4 कण्डरा in neck region .  
4 कण्डरा in the back .

लोडरा कण्डराः । शं. सं. 5.

Formation of कण्डराः → Kandaras are  
formed from the शोथ of  
शेधातु , due to action of agni &  
vata dosha. (It is made up in  
intra uterine)

Functions →

① It fastens the joints in neck,  
back and extremities very firmly,  
so all the joints can do various  
movements and bare force applied  
to it.

②

(2) Firmness of back, neck and head depends on the strength of Karandaya.

त्वचा (त्वक्) skin.

It is 'bhushtu' of 'mishra'.

Definition of त्वचा :->

मांसानु वसा त्वचाः सट्टे च ।  
त्वचानि संवृणोति मेद शोणित्वादिषु इति  
च. वि.

synonyms :-> त्वक्, त्वर्मा, त्वक्, त्वक्पल, श्वशनि, & skin.

Development of त्वचा :->

In the foetal life, skin is formed and developed in like as layers of cream are formed on the boiling milk.

Due to similarity between function of skin and 'mishra', skin (त्वचा) is considered as a 'bhushtu' of 'mishra'.

Function :-> Function of 'mishra' is to cover the bones and support to the body. skin also gives support to the body in the form of external covering of the body.

skin protects the body.

Nourishment of skin -> skin is nourished at the time of metabolism of 'mishra'.

## Relation of skin with doshas, dhatus & malas →

- ① skin is the largest sense organ of touch. *सुनिर्णय - स्पर्शबुद्धि*
- ② skin is the seat of *वातदोष*.
- ③ skin is seat of *मूत्रकपित्त*
- ④ Radiant glowing skin indicates proper functioning of *रक्तधातु*
- ⑤ Person who is having *उत्तमरससारंग* has beautiful and delicate skin. *रक्तसारं रससारं । शुभ्रसलमृद्गुणं शुभ्रं रक्तसारं विद्यते ।*
- ⑥ Waste product of *मूत्रधातु* is excreted through skin and it keeps skin oily.
- ⑦ Healthy skin the sign of balanced state of doshas, dhatus & malas

## functions of skin →

- ① conduction of heat
- ② maintenance of complexion of skin
- ③ (Lepana) *लेपन* covering is the function of skin & so skin protects the body.
- ④ *ह्योपेलेपन*, which is superficial layer of the skin stores water and protects body from dehydration.

6) शोथीणी

7) मांसहरकला

concept of

छाया & प्रभा

छाया → for छाया वाला दोष is responsible shadow invades the complexion so skin become dull due to shadow (छाया)

Types - 5

- 1) नाभसि
- 2) वायवी
- 3) भाग्नेयी
- 4) अम्भशी
- 5) पाथीवि

वायवीय छाया may cause death

and other four types of छाया are शुभ or auspicious.

Concept of प्रभा lusture.

7 types of प्रभा.

- 1) Red
- 2) yellow
- 3) white
- 4) blackish
- 5) greenish
- 6) pale
- 7) black



वसा

Definition of वसा :->

शुद्धमांसस्य च श्लेहः, सा वसा परिक्लिर्तिता वसा is कपद्यानु of मांसद्यानु .

मांसात् वसा लब्धः सत च ।

श्लेह of शुद्ध मांसद्यानु is called वसा fat.

वसा means to cover

वसति शरीरे विशेषतः, मांसे इति वसा .  
अपक्वाह्यति शरीरं मांसम् कपदादिकं इति वसाः ।

वसा is the श्लेह present in the मांसद्यानु . It is the muscle fat which deposited around and over abdominal organs .

Types of Properties of vasa ->

It is oily and heavy, श्लेष्म गुणः .

प्रमाण of वसा ->

तस्य अंजलंशः वसायाः ।

उ अंजली प्रमाण .

Functions of वसा :->

It provides strength to मांसद्यानु

Formation of वसा :->

It can be obtained by boiling the

ग्रीसिलिंग in the water, the fat which floats on the water is called as अक्षत.

महाशोथ → घृत, तैल वसा & मज्जा these are the four types of शोथ. Among this घृत is the best. All are used for ~~शोथ~~ शोथोत्थान (oleation therapy)

(मेद is धातु tissue.  
वसा is Peritoneal fat.)

Due to constant movements of ग्रीसिलिंग अक्षत may become dry and वातदोष may increase. Oily अक्षत facilitates function of ग्रीसिलिंग.

श्रोणि - ligaments & Tendons

It is the bony of श्रोणि.

Formation of snayu:

In fetal life

It is formed from the

snaha of श्रोणि, due to रक्त

Due to रक्त श्रोणि becomes tough and strong.

Numbers of snayu: → 900 snayus are in the body.

Types of snayus:

① श्लानवत - Ramifying

② वृत्त - round shape kamdara,

③ पृथु flat snayus

④ शुषिर - sphincters.

श्लानवतो वृत्ताश्च पृथुश्च शुषिराश्च ।

① श्लानवत <sup>ligaments</sup> श्रोणि are present at all joints and in upper and lower extremities.

② वृत्त tendons are present in upper & lower extremities & in the back.

③ पृथु flat ligaments are present in chest, back and head.

④ पृथु ~~flat~~ <sup>शुषिर</sup> ligaments are present

In small & large intestine,  
these are cleaved in shape & they belong to slide type of  
joint.

Pyloric sphincter, sphincter of  
anal canal belong to slide type of  
joints.

Location of synovial: →

these are spread all over  
the body. these are the structures  
which bind muscles and bones  
together.

Functions of synovial: →

Human body is bound and  
fastened at joints by ligaments.  
Due to synovial body becomes tough  
and conducts lot of manual  
work.

### दंत - Teeth

It is कर्णिक of शक्तिशाली .

Synonyms :-

द्विज, ज्वलन, दंत, शक्तिशाली

Functions of Teeth :- ① Mastication of food.

② Proper digestion of food depends on mastication of food.

③ In old age when the teeth are lost, food is not properly chewed many disorders of GI-tract occur.

Relationship between doshas, Dhatus to teeth.

① Teeth are smaller in size in old people.

② In young people persons have strong teeth.

③ शक्तिशाली persons also have strong and big teeth.

In शक्तिशाली persons teeth are compact, smooth and white in colour.

In शक्तिशाली persons the teeth are शक्तिशाली oily, शक्तिशाली.