

# **GRANTHI** **SAMPRAPTI (PATHOGENESIS)**

**VATA & OTHER DOSHAS**



**MUSCLE, BLOOD, FAT TISSUE**



**GRANTHI**  
**(ROUND, BULGED, HARD SWELLING)**

# TYPES

## ◆ SUSRUTA

1. VATAJA
2. PITTAJA
3. KAPHAJA
4. MEDOJA
5. SIRAJA

# ◆ CHARAKA

1. VATAJA
2. PITTAJA
3. KAPHAJA
4. MEDOJA
5. SIRAJA
6. MANSAJA

# ◆ VAGBHATA

1. VATAJA
2. PITTAJA
3. KAPHAJA
4. MEDOJA
5. SIRAJA
6. RAKTAJA
7. ASTHI GRANTHI
8. VRANA GRANTHI

# LAKSHANA(SIGNS & SYMPTOMS)


## ◆ VATAJA GRANTHI

- BLACK COLOUR
- HARD
- PAIN(EXPANDING,HITTING,PRICKING,CUTTING)
- ENLARGED LIKE BLADDER
- EXUDATES CLEAR BLOOD

## ▪ PITTAJA GRANTHI

- RED & SLIGHTLY YELLOWISH
- PAIN (BURNING, SUCKING)
- EXUDES WARM BLOOD IN LARGE QUANTITY

## ▪ **KAPHAJA GRANTHI**

- ◆ **NOT DISCOLOURED**
  - ◆ **BIG LIKE STONE**
  - ◆ **DEVELOPS SLOWLY**
  - ◆ **COLD TO TOUCH**
  - ◆ **SLIGHT PAIN**
  - ◆ **SEVERE ITCHING**
  - ◆ **EXUDES WHITE THICK PUS**
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## ▪ MEDOJA GRANTHI

- ◆ VERY BIG IN SIZE
- ◆ PRODUCED BY MEDA(FAT)
- ◆ INCREASES/DECREASES ACC TO BODY MASS
- ◆ MILD PAIN
- ◆ SEVERE ITCHING
- ◆ EXUDES FATTY LIQUID RESEMBLING PASTE OF SESAME OR GHEE

## ▪ **SIRAJA GRANTHI**

- ◆ **OCCURS IN WEAK PERSONS WHO INDULGE IN MORE PHYSICAL EXERCISE**
- ◆ **VATA AGGRAVATE**
- ◆ **INVADES NETWORK OF VEINS**
- ◆ **SQUEEZES, CONSTRICTS & DRIES UP**
- ◆ **ELEVATED, QUICK DEVELOPING & ROUND SWELLING OF VEINS**

## ▪ RAKTAJA GRANTHI

- ◆ BLOOD VITIATED BY AGGRAVATED DOSHAS
- ◆ SEATED ON SIRA(VEINS) & MANSA(MUSCLES)
- ◆ SIGNS & SYMPTOMS LIKE PITTAJA GRANTHI

# ▪ MANSAJA GRANTHI

◆ LARGE IN SIZE

◆ HARD IN CONSISTENCY

◆ COVERED BY VEINS ON THE SURFACE

## ▪ **ASTHI GRANTHI**

- ◆ **DEFORMITY DEVELOPED IN THE BONE AFTER THE FRACTURE IS CALLED ASTHI GRANTHI**

## ▪ **VRANA GRANTHI**

- ◆ **DEVELOPS IN THE PERSON HAVING WOUND WHEN HE INDULGES IN UNHEALTHY/ IMPROPER FOOD & ACTIVITIES**
- ◆ **WHEN HE NEGLECTS THE WOUND & DON'T DO DRESSING OF WOUND**
- ◆ **WHEN THERE IS TRAUMA ON THE PREVIOUS WOUND**

# CYSTS

## CYST (GREEK) – BLADDER

- **DEFINATION –**

**A SWELLING CONTAINING FLUID IN A SAC, USUALLY, BUT NOT ALWAYS, LINED BY EPITHELIUM / ENDOTHELIUM**



# TYPES

- **GR I**
  - A. TRUE CYSTS**
  - B. FALSE CYSTS**
- **GR II**
  - A. CONGENITAL CYSTS**
  - B. AQUURED CYSTS**



# TRUE CYSTS

- **USUALLY LINED BY EPITHELIUM /  
ENDOTHELIIUM**
- **IF INFECTED, THIS LINING MAY BE  
REPLACED BY GRANULATION TISSUE**



- **NATURE OF THE CONTENT**

1. **SEROUS / MUCOID –**

**SECRETION OF LINING MEMBRANE. MAY BE COLOURLESS / BROWNISH DUE TO ALTERED BLOOD. CHOLESTEROL CRYSTALS OFTEN PRESENT**

2. **GREY TOOTH PASTE LIKE –**

**DUE TO ACCUMULATION OF DESQUAMATED EPITHELIUM IN THE FLUID. eg – SEBACEOUS CYST, DERMOID CYST**



# FALSE CYSTS / PSEUDOCYSTS

- **EXUDATION CYSTS** –  
OCCURRING IN THE ANATOMICAL SPACES  
ALREADY LINED BY ENDOTHELIUM. eg –  
HYDROCELE, BURSA, PSEUDO PANCREATIC CYST
- **DEGENERATION CYSTS** –  
NO LINING MEMBRANE. eg – CYSTIC  
DEGENERATION IN THE CENTRE OF THE  
MALIGNANT TUMOUR, APOPLECTIC CYST IN THE  
BRAIN FOLLOWING ISCHAEMIA.



# CONGENITAL CYSTS

1. **DERMOID CYSTS** –  
**EPITHELIAL SECRETIONS**
  
1. **CYSTS OF EMBRYONIC REMNENTS** –  
**INTRAPERITONEAL CYSTS (VITELLO –  
INTESTINAL DUCT), HYDATID CYST OF  
MORGAGNI (MULLERIAN DUCT)**



# AQUIRED CYSTS

- **IMPLANTATION CYSTS** –  
**IMPLANTATION DERMoids**
- **RETENTION CYSTS** –  
**DUE TO RETENTION OF SECRETION OF  
GLAND DUE TO BLOCKAGE OF DUCTS. eg –  
SEBACEOUS CYST, BARTHOLIN CYST,  
CYSTS IN PAROTID, BREAST, PANCREAS.**



- **DISTENTION CYSTS** –  
DUE TO DILATAION OF NORMAL ACINI /  
FOLLICLES. eg – THYROID CYST, OVERIAN  
FOLLICULAR CYSTS, LYMPHATIC CYSTS
- **EXUDATION CYSTS**
- **DEGENERATION CYSTS**




- **CYSTIC TUMOURS** –  
**CYSTADENOMAS OF BREAST, THYROID, ETC**
- **TRAUMATIC** –  
**HEMATOMA IN MUSCLE DERIVE ENDOTHELIAL  
LINING & FLUID INSIDE BECOMES BROWNISH,  
CONTAINING CHOLESTEROL CRYSTALS**
- **PARASITIC CYSTS** –  
**HYDATID CYSTS**



# **ARBUDA**

## **SAMPRAPTI (PATHOGENESIS)**

- ◆ **AGGRAVATED DOSHAS CAUSING VITIATION OF MUSCLE TISSUES**
  - ◆ **SWELLING IS ROUND, IMMOVABLE, DEEP ROOTED**
  - ◆ **BIG IN SIZE, GROWING SLOWLY, NOT RIPENING(PUS FORMATION)**
  - ◆ **MILD PAIN**
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# TYPES

- VATAJA
- PITTAJA
- KAPHAJA
- RAKTAJA
- MAMSAJA
- MUDOJA
- SHARKARA

◆ **ADHYARBUDA** –

DEVELOPES OVER AN EARLIER ONE (SUPERIMPOSED TUMOUR)

◆ **DWIRARBUDA** –

PRODUCED AT THE SAME TIME / AFTER SOME TIME (METASTASIS / SECONDARY TUMOURS)

# PROGNOSIS OF MALIGNANT TUMOURS

- DIFFERENTIATION OF THE TUMOUR CELLS – MORE UNDIFFERENTIATION, WORSE IS THE PROGNOSIS
- EXTENT OF THE DISEASE – LOCAL INFILTRATION, NODE INVOLVEMENT, DISTANT METASTASIS
- BIOLOGY OF THE CANCER – SOME RAPIDLY GROWING(SQUAMOUS CELL CARCINOMA OF LUNG),SLOW GROWING(PAPILLARY CARCINOMA OF THYROID),UNPREDICTABLE(MALIGNANT MELANOMA)



- **AGE OF THE PATIENT – YOUNGER THE PATIENT, WORSE IS THE PROGNOSIS**
- **HOST FACTOR – LIKE INFECTION, RESISTED BY THE IMMUNITY OF THE HOST**
- **TUMOUR LOCATION – IF INVOLVING ORGANS ARE LIVER / BRAIN, PROGNOSIS IS WORSE**



# ASSESSMENT OF THE MALIGNANCY

- **BRODER'S GRADING  
(HISTOLOGICAL METHOD)**

**GRDE I – UPTO 25% CELLS UNDIFFERENTIATED**

**GRDE II – 25 TO 50% CELLS UNDIFFERENTIATED**

**GRDE III – 50 TO 75% CELLS UNDIFFERENTIATED**

**GRDE IV – MORE THAN 75% CELLS  
UNDIFFERENTIATED**



- **TNM CLASSIFICATION  
(CLINICAL METHOD)**

**T – THE EXTENT OF PRIMARY  
TUMOUR(SIZE OF TUMOUR)**

**T1 - LESS THAN 2 CM**

**T2 - 2 TO 5 CM**

**T3 – 5 TO 10 CM**

**T4 – MORE THAN 10 CM**



# **N – INVOLVEMENT OF THE LYMPHNODES**

- **$N_0$  – NO SIGNIFICANT NODES**
- **$N_1$  – SIGNIFICANT BUT MOBILE REGIONAL NODES**
- **$N_2$  – SIGNIFICANT & FIXED REGIONAL NODES**
- **$N_3$  - SIGNIFICANT DISTANT NODES**



# M – PRESENCE OF DISTANT METASTASIS

- $M_0$  – ABSENCE OF DISTANT METASTASIS
- $M1$  – PRESENCE OF DISTANT METASTASIS

