

**Mahatma Gandhi Ayurved College, Hospital & Research Centre,**

**Salod (H), Wardha**

**Names of the themes for PhD Curriculum**

**Subject: Shalyatantra**

## **1. Shalya Siddhanta – Fundamentals of Surgery**

**Subthemes: -**

- 1.Sushruta's contributions in surgical concepts and practices, Knowledge of Dosha, Dhatu and Mala Vigyan
- 2.Yantras and Shastras – Surgical Instruments - Ancient and recent advances
- 3.Nirjantukarana – Sterilization
- 4.Surgical infections – Sepsis, Tetanus and Gas gangrene.
- 5.Care of patients suffering from Hepatitis, HIV-AIDS, STD and other associated infectious diseases.
- 6.Trividha Karma, Ashtavidha Shastra Karma
- 7.Suturing materials, appropriate use of sutures, drains, prosthetic, grafts and surgical implants.
- 8.Concept of Marma and their clinical application.
- 9.Shock - Its varieties and management.
- 10.Raktasrava / Haemorrhage – Types, Clinical features and Management, Concept of Raktastambhana – 11.Haemostasis, Significance and importance of Rakta as the Chaturth Dosha.
- 12.Vranasopha – Inflammation and Vidradhi - Abscess
- 13.Granthi – Cyst and Arbuda – Benign and malignant Neoplasm – Concept of Oncogenesis and genetics of cancer, Gulma and Udara Roga, Kshudra Roga
- 14.Fluid, electrolyte, Acid Base Balance and Nutrition, Blood Transfusion
- 15.Knowledge of in surgical practice.

## **2. Vishishta Shalya Vigyana - Shalya Tantra Speciality-1**

**Subthemes: -**

1. **Yogya Vidhi** - Practical and Experimental training i. Practice of surgical procedures on different models. ii. Training of Laproscopic and Endoscopic procedures.
2. **Vrana** – Wound management i. Management of Nija Vrana, Agantuja Vrana, Dushta Vrana and Nadi Vrana. ii. Vrana Chikitsa – Shasti upakramas, Pathya-apathya . iii. Types and Management of Dagdha Vrana - Burns and scalds.
3. Infection of hands and foot, Diabetic wound, Prameha Pidaka – Diabetic carbuncle and its management, Management of Pressure ulcers, Venous ulcers and other chronic non-healing ulcers, Gangrene and its management.
4. **Mutra Roga** – Urological diseases. i. Anatomical and physiological knowledge of kidney, ureter, urinary bladder, prostate, seminal vesicles, urethra and penis. ii.

- Investigations of Mutravaha Srotas – Urinary tract. iii. Aetiopathogenesis and surgical procedures of Ashmari – Urinary stone diseases.
5. **Kidney and ureter** – Clinical presentation, Investigations and Management of Congenital anomalies, Trauma, Infection, Neoplasm, Hydronephrosis, Hydroureter and Haematuria., **Urinary bladder** - Clinical presentation, Investigations and Management of Congenital anomalies, Trauma, Infection, Neoplasm, Diverticulum, Vesicovaginal fistula, Atony, Schistosomiasis, Urinary diversions, Retention of urine – Mutraghata and Mutrakruccha. **Urethra** - Clinical presentation, Investigations and Management of Congenital anomalies – Hypospadias, Epispadias, Posterior urethral valve, Trauma, Infection, and Neoplasm.
  6. **Prostate and seminal vesicles** – Benign and malignant enlargement of prostate, Prostatitis, Prostatic abscess and Calculi. **Penis** – Clinical presentation, Investigations and Management of Congenital anomalies, Trauma, Infection, Phimosis, Paraphimosis, Peyronie’s disease and Neoplasm. **Testis and scrotum** - Clinical presentation, Investigations and Management of Congenital anomalies, Ectopic testis, Trauma, Infection, Neoplasm, Testicular torsion, Hydrocele, Varicocele, Spermatocele, Chylocele, Pyocele, Haematocele, Epididymal cyst and Fournier’s gangrene. **Renal failure** – Causes, Diagnosis, Investigations and Management.
  7. **Asthi roga and Marma Chikitsa** - Orthopaedics i. Anatomy and physiology of bone. ii. Diseases of Asthi / Bone and Sandhi / Joints – Congenital, Degenerative, Infective, Metabolic and Neoplastic **Disorders of Bones and Joints**- Aetiopathogenesis, treatment along with surgical procedures of Bhagna - Fracture, Sandimoksha - Dislocation and bone grafting. Diseases of Spine, vertebral column and spinal cord.

### 3. Adhunik Shalya Karma - Modern surgery-1

#### Subthemes: -

1. Fundamentals of modern surgery and treatment of surgical disorders including surgical anatomy, physiology and pathology.
2. Diagnosis and Surgical treatment of head and spine injury, thoracic trauma and abdominal trauma. Blast injuries and Management
3. Diagnosis and Surgical management of neck disorders e.g. salivary glands, thyroid, Thyroglossal cyst and Fistula, Branchial cyst and fistula, Cystic hygroma and Lymphadenopathies.
4. Diagnosis and Surgical management of breast diseases, Benign and Malignant breast tumours
5. Diagnosis and Surgical measures of diseases of Gastrointestinal system
6. Gastrointestinal bleeding – Haemetemesis, Malaena, Haemobilia, Bleeding per anum - Causes, Diagnosis and Management.
7. Anorectal diseases

### 4. Adhunik Shalya Karma - Modern surgery-2

#### Subthemes:-

1. Umbilicus and abdominal wall –

2. Diagnosis and surgical measures of diseases of Hepatobiliary system
3. Diagnosis and surgical measures for disorders of Artery, Vein, Ligaments, Muscles and Tendons.
4. Diagnosis and surgical management of Hernias – Inguinal, Femoral, Umbilical, Incisional, Abdominal wall and other hernias.
5. Endoscopic procedures - Oesophagogastroduodenoscopy, Sigmoidoscopy and Colonoscopy.
6. Diagnostic and therapeutic laparoscopy.
7. Anaesthesia -

## **5. Shalya Vangmaya – Shalya literature, Research and Development**

### **Subthemes:-**

1. Thorough study of the Sushruta Samhita including other relevant portions of Brihatrayee and Laghutrayee.
2. Knowledge and importance of Surgical Audit.
3. Medico legal issues – Consumer Protection Act, medical profession, national health policy - Implications in a medico-legal case like accidents, assaults etc.
4. Surgical ethics including Informed consent.
5. Knowledge of different type of experimental Surgical Model for Research in Surgery.
6. Sandhana Karma – Plastic reconstructive and cosmetic surgery.
7. Anushalya Karma – Parasurgical procedures i. Kshara Karma, Kshara Sutra, Agnikarma and Raktamoskhana