

## Curriculum for PhD in Shalakyatantra

### 1. NetraRogVigyan

#### A) NetraRogVangmaya

- Available literature of Netrarogavigyana in Brihatrayi, Laghutrayi, Yogaratnakar, Chakradutta, BhelSamhita, Haritasamhita and Kashyapsamhita.
- Critical analysis of the available literature of netrarogavigyana in the above given classics e.g. Puyalasa and VatahataVartmaInSushrutasamhita and Vagabhatsamhita.
- Unique/ specific contribution of different classics, Acharyas and commentators in the development of Netrarogavigyana.
- Analytical determination of subjects related to eye disorders in ancient and modern literatures.
- Update chronological development of Netrarogavigyana right from Vedic period.
- Update chronological development of Ophthalmology

#### B) AyurvediyaNetraRogVigyan

- Enumeration and classification of NetraRogas. 2. Descriptive knowledge of etiology, pathogenesis, prodromal symptoms, clinical features, complications and prognosis of pakshma -vartma- sandhi- - shukla- Krishna- dristi&sarvagatarogas along with exogenous eye diseases available in Ayurvedic classics. Medical and surgical Management of the above diseases with special skill development in Ashtavidhashastra&TrividhaAnushastrachikitsa related to Netraroga.
- Netrakriyakalpa procedures like seka, ashchyotana, vidalaka, pindi, tarpan, putapaka&anjana and their practical application and analysis based on ocular pharmacology. Standard operative procedures for Kriyakalpas including Aushadakalpanas.
- Study of nayanabhighataand , its management and prevention.
- Knowledge of preventive and community ophthalmology along with national programme for control of blindness and role of Ayurveda.
- Ayurvedic Concept of Congenital, developmental and neoplastic diseases of netra

#### C) AdhunikaNetraRogVigyan

- Knowledge and application of current diagnostic techniques and equipments and therapeutics in Ophthalmology.
- Detailed study of refractive errors along with defects of accommodation and their management. 3. Detailed knowledge of classification, etiology, pathogenesis, signs and symptoms, differential diagnosis, prognosis and complications of diseases of eye orbit, lacrimal apparatus, lids, conjunctiva, cornea, sclera, uveal tract, lens, vitreous, retina,

optic nerve and visual pathway with comprehensive knowledge of their medical and surgical management.

- Ocular trauma , its emergencies and management.
- Ocular motility disorders and their medical and surgical management
- Neurological and systemic disorders affecting the eyes and their management

#### **D) Recent Advances in NetraChikitsa& Ophthalmology**

- Update advances in the development of Ayurvedic drug formulations, therapeutic procedures and treatments of Netraroga.
- Advanced technologies in the diagnosis of eye diseases.
- Advanced technologies & techniques in the medical & surgical management of Netraroga.
- Advanced management and technologies in Ophthalmology.
- Detailed study of recent research works on chakshushyadravyas.
- Comparative and critical study of modern advances in surgical techniques over the surgical methods described in Ayurvedic classics

## **2. ShiroRogaVigyan**

### **A) AyurvediyaShiroRogaVigyanMaulikSiddhanta and Vangmaya**

- Detailed study of Shalakyatantra from Bruhatrayee, Laghutrayee, Kashyapsamhita, Yoga ratnakar, Chakradutta, Bhelsamhita ,Haritasamhita and other granthas.
- Comparative and critical study of rogas explained by various granthas
- Syntactical derivation, definition and importance of the word “Shalakyas” Sequential development and history of science of Shiras disorders. Establishment of “Superiority of shiras’ among the organs. Determination and importance of the verse ‘Nasa Hi ShirasoDvaram’. Syntactical derivation and the synonyms of the words Shiras.
- Descriptive knowledge of the anatomy and Physiology of Shiras as per ancient and modern science.
- Examination of theshira as per Ayurveda and modern science.
- Common etiology of shiras disorders, their pathogenesis, prodromal symptoms, classification, clinical features and general treatment.
- Importance of shaman and sodhana therapy in shira disorders with general introduction to local therapeutic procedures of shira.
- Detailed applied knowledge of recent advanced diagnostic and therapeutic techniques and equipments (Yantra and Shastra) used for Shira disorders.
- Examination of the shira patients..
- Shira and Kapala (cranial vault) disorders samkhyasamprapti, descriptive knowledge, etiology, pathogenesis, prodromal symptoms, classification, clinical features, Upasaya-Anupsaya (prognostic measures) and complications of Shira and kapala diseases

described in the classics of Ayurved. Detail description along with practical knowledge of treatment.

### **B) AdhunikashiroRogavigyan**

- Descriptive knowledge of instruments and recent equipments available for diagnosis of head disorders along with their practical application.
- Descriptive knowledge of etiology, pathogenesis, clinical features, differential diagnosis, classification along with complications of different head disorders. Detail knowledge of the treatment (including conservative and surgical) of the above mentioned disorders.
- Imaging in Head disorders, detailed knowledge of LASERS, radiotherapy, chemotherapy and other recently advanced treatment modalities related to head disorders.
- Management of emergencies in head disorders

### **B) ShiroRogaVigyanShalyaChikitsa**

- Knowledge of agropaaharniyaand trividha karma i.e pre operative, operative and post operative measures. Knowledge of eight types of surgical procedures (AstavidhaSasthra Karma) and post operative care of the patient (Vranitopasaniya).
- General introduction of four treatment procedures like Bheshaj– Kshar – Agni– Shastra and Raktavsechana with their applied aspects in shirodisorders .Chaturvidhaupakrama in raktasandhanvidhi related to head disorders.
- Removal of foreign bodies in the shira as per Ayurveda and modern science.

## **3.Nasa- Karna - KanthaRog**

### **a) AyurvediyaNasa- Karna - KanthaRogaVigyanMaulikSiddhanta and Vangmaya**

- Sequential development and history of science of ear, nose, throat
- Syntactical derivation and the synonyms of the words Karna, Nasa, Kantha, etc.
- Descriptive knowledge of the anatomy and Physiology of ear, nose, throat as per ancient and modern science
- Examination of the ear, nose, kantha as per Ayurveda and modern science.
- Common etiology of ear, nose, throat disorders, their pathogenesis, prodromal symptoms, classification, clinical features and general treatment.

- Importance of shaman and sodhana therapy in ear, nose, throat disorders with general introduction to local therapeutic procedures of ear nose and throat e.g. kaval, gandusha etc.
  - Detailed applied knowledge of recent advanced diagnostic and therapeutic techniques and equipments (Yantra and Shastra) used for ENT disorders.
  - General knowledge of ‘vranabandhana’ (bandaging of wounds) and applied bandage in ear etc.
  - . Update chronological development of ENT from Vedic period.
  - . Study of essential modern drugs, anaesthetic agents of diagnostic and surgical importance.
  - Examination of the ear, nose, throat patients
  - Karna-Nasa –Kanthasamkhyasamprapti, descriptive knowledge of etiology, pathogenesis, prodromal symptoms, classification, clinical features, Upasaya- Anupsaya(prognostic measures) sadhyasadhyatwa and, complications of ear disorders described in the classics of Ayurved. Detail description along with practical orientation of their management
- B)AdhunikaNasa- Karna - KanthaRogavigyan**
- Descriptive knowledge of instruments and recent equipments available for diagnosis of ear – nose – throat disorders along with their practical application.
  - Descriptive knowledge of etiology, pathogenesis, clinical features, differential diagnosis, classification along with complications of different ear – nose- throat disorders. Detail knowledge of the treatment (including conservative and surgical) of the above mentioned disorders.
  - Imaging in ENT disorders, detailed knowledge of LASERS, radiotherapy, chemotherapy and other recently advanced treatment modalities like speech therapy, cochlear implant, rehabilitation of the deaf and mute, etc. related to ear – nose – throat disorders.
  - Management of emergencies in ENT disorders
- c)Nasa- Karna -KanthaRogaVigyanShalyaChikitsa**
- Practical knowledge of updated surgical procedures in ear – like constructive surgery of external and middle ear,excision of pre auricular sinus, Tympanoplasty, Mastoidectomy, Stapedectomy, Endolymphatic surgery, Facial nerve decompression surgery, Cochlear implant, etc with their complications and their management.
  - Nose – Septo-rhinoplasty, SMR, Functional Endoscopic sinus surgery,CaldwellLuc surgery, Antralpuncture,Antrallavage,Turbinectomy,Polypectomy, Various surgical procedures done for malignancy of Nose and paranasalsinuses,Young’s surgery,etc
  - Throat - Adenoidectomy, Tonsillectomy, Surgical procedures for pharyngeal abscesses, cauterization of pharyngeal wall granulations, tracheostomy, vocal cord surgery, surgery of vocal cord paralysis, management of laryngeal trauma, laryngectomy,etc.
  - General introduction of four treatment procedures like Bheshaj– Kshar – Agni– Shastra and Raktavsechana with their applied aspects in ear nose throat disorders

.Chaturvidhaupakrama in raktasandhanavidhi related to ear nose throat disorders.  
Haemostatic management in ENT.

- Removal of foreign bodies in the ear nose throat as per Ayurveda and modern science.
- Karna-SandhanNasa-Sandhan, fundamental and applied aspects of Ayurveda

#### **4. DantaRogVijnanaavigyan**

##### **A) AyurvediyaDantaRoga --Siddhanta and Vangmaya**

- Etymology, definition and importance of the word 'Shalakya', History and development of the science of dental diseases. Etymology and synonyms of the word 'Danta'. Ancient and recent knowledge of anatomy of teeth
- Agropaharaniya, knowledge of purva, pradhan and pashchat karma. Study of AshtaVidhaShastra Karmas in relation to DantaRoga.
- Applied and detailed study of therapeutic measures for dental disorders, like Kavala, Gandusha, Dhumapana, Nasya, MurdhtailaMukhalepa and Pratisarana and their definition, types, indications, contraindications, procedure, features of proper,excess, deficient application and their management.
- Importance of shodhan and shaman treatment in dental diseases and knowledge of common recipes useful in dental diseases.
- General introduction of four types of treatment (Bheshja, Shastra, Kshara, Agni). Detail description of Anushastra karma; their practical knowledge in dental diseases.
- Analytical determination of related subjects of danta disorders available in ancient and modern commentaries of different Samhita
- Examination of periodontia and teeth. Teeth eruption and its systemic disturbances in a child, Classification, Number of teeth along with detail knowledge of abnormal tooth eruption. Dental disorders in paediatric age group, their prevention and treatment.
- Dantagatarogas - Dental diseases detailed in the classics of Ayurved; their etiology, pathogenesis, prodromal symptoms, clinical features, complication and applied approach in the treatment of dental diseases.
- Detailed study of etiology, pathogenesis, prodromal-symptoms, clinical features, complications and prognosis of diseases of the Danta-MulaGataRoga (gum- periodontia) as detailed in the classics of Ayurved. Practical approach/orientation in Treatment of the periodontal diseases.
- Knowledge of Dantabhighata (dental trauma) along with diagnostic and referral skills.

##### **B)AdhunikDantaRogVijnan**

- Detail study of etiology, pathogenesis, clinical features, classification and complication of various dental diseases available in literature of Modern sciences. Detail study of their recent available medical therapeutics.

- Detail description of diagnostic technology in the diagnosis of dental disease.
- Study of essential modern drugs, anaesthetic agents of diagnostic and surgical importance.
- Descriptive Knowledge of up-to-date available modern instruments and their application for examination, diagnosis and management of periodontal and dental diseases.
- Up-to-date knowledge of applied and available surgical procedures indicated in various dental diseases like tooth extraction, RCT, Dental filling, filling materials, tooth fixation and tooth implants etc.
- Systemic Effects of periodontal and dental diseases

### **C)DantaRogVijnana& Dentistry**

- JaalandharaBandha, its importance and application in Tooth extraction without anaesthesia.
- VishishtaUpadantaparikalpana (Dental Material and Prosthesis).
- Recent Research studies and advanced clinical applications ofKriyaKalpas in DantaRogas.
- Detailed study of recent available medical therapeutics and Research studies in Dental disorders.
- Adavnced diagnostic technology in Dentistry pathology.
- . Useful conducts for treatment of dental diseases with study of related medico legal aspects.

## **5. MukhaRogVijnana**

### **a) AyurvediyaMukhaRoga – Siddhanta and Vangmaya**

- Etymology, definition and importance of the word ‘Shalakya’, History and development of the science of oral diseases. Etymology and synonyms of the word ‘Mukha’. Ancient and recent knowledge of anatomy of oral cavity along with the knowledge of salivary glands.
- Detailed study of Oral cavity and gustatory physiology.
- Oral hygiene, Social aspect of oral hygiene, preventive measures in oral cavity diseases, general etiology, pathogenesis, prodromal symptoms, clinical features and general management of oral cavity diseases.
- Agropaharaniya, knowledge of purva, pradhan and pashchat karma. Study of AshtaVidhaShastraKarmas in relation to MukhaRoga.
- Applied and detailed study of therapeutic measures for oral disorders, like Kavala, Gandusha, Dhumapana, Nasya, MurdhtailaMukhalepa and Pratisarana and their definition, types, indications, contraindications, procedure, features of proper,excess, deficient application and their management.
- Importance of shodhan and shaman treatment in oral diseases and knowledge of common recipes useful in oral diseases.

- General introduction of four types of treatment (Bheshja, Shastra, Kshara, Agni). Detail description of Anushastra karma; their practical knowledge in oral diseases.
- Analytical determination of related subjects of mukha disorders available in ancient and modern commentaries of different Samhita
- Examination of oral cavity, Oshtha (lip), Jihva (tongue) and Talu (palate) Rogas, detailed study of etiology, pathogenesis, prodromal - symptoms, clinical features, complications and, prognosis. Detailed description of their treatment along with practical orientation.
- SarvasaraMukharogas (Generalized oral diseases) available in ayurvedic classics. Detailed study of etiology, pathogenesis, prodromal-symptoms, clinical features, complications, prognosis and management of mukharogas along with practical orientation.

Knowledge of Mukhabhighata (oral injury) along with diagnostic and referral skills.

### **B) AdhunikMukhaRog Vijnan1.**

- .Detail study of etiology, pathogenesis, clinical features, classification and complication of various oral diseases available in literature of Modern sciences. Detail study of their recent available medical therapeutics.
- Detail description of diagnostic technology in the diagnosis of oral disease.
- Study of essential modern drugs, anaesthetic agents of diagnostic and surgical importance.
- Descriptive Knowledge of up-to-date available modern instruments and their application for examination, diagnosis and management of oral diseases.
- Systemic Effects of oral diseases.
- Recent Research studies and advanced clinical applications of KriyaKalpasin MukhaRogas.
- Detailed study of recent available medical therapeutics and Research studies in oral cavity disorders.
- Adavnced diagnostic technology in and oral pathology.
- Benign and malignant tumors of Oral Cavity, their management and role of Ayurveda in Such conditions.
- Useful conducts for treatment of oral diseases with study of related medico legal aspects.