Oesophageal Motility Disorders

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The literature is reviewed with special consideration on Anatomy of the oesophagus due to its importance in studding oesophageal motility disorders. in this part we discusses the relations of oesophagus in the neck' in the thorax and in the abdomen then we discuss muscles of the oesophagus at the inlet, in the body and at the lower portion of the oesophagus. WE also gave a note about the diaphragmatic oesophageal hiatus. The arterial supply, venous drianage, nerve supply and lymphatics of oesophagus has been also reviewed. At the end of this part we give a hint about the histology of the oesophagusIn the second part of this review of literature, Physiological considerations about oesophagus has been discussed with special attention to the sphintteric tone, its neural and hormonal control and factors affecting the lower oesophageal competence which are:-1)The lower oesophageal sphincter.2)The intra-abdominal segment of Oesophagus.3)The acute angle of entery of oesophagus into the stomach.4)Mucosal Rosette at the cardia.5)The phreno-esophageal ligament(Allison's ligament".6)The pin-cock action of the diaphragmatic crura.7)The relation of the diaphragm to the lower oesophageal sphincter.In the third part of the review, oesophageal motility disorders has been classified according toSeparatiod of the organ into its upper sphincter on the one hand and the body of the opsophagues& lower sphincter on the other.(A) Oesaphageal Motility disorders in DEper sphineter:-L) Idiopathic pharyngoesophageal diverticulum.2) Neuromuscular diseases.a) C.N.S. diseases.•Cerebrovascular accident.•Bulbar poliomyelitis.•Multiple sclerosis.b) Muscular diseases.•MusCular dystrophy.Myasthenia gravis.•Dermatomyositis.•Thyrotoxis myopathy.3) Radical oropharyngeal surgery.(B) Oesophageal Motility disorders in Body and lower sphincter of the oesophagus:-1) Hypomotility:*Achalasia.*Hypotensive lower sphincter.-Idiopathic.-Hiatus hernia.-Post operative.-Miscellaneous conditions.2) Hypermotility:-*Diffuse spasm of the oesophagus and hpeYtentiOM lower sphiOCter.*Lacalized oesophageal spasm e-g.:--Plummer-Vinson syndrome.-Lower oesophageal ring.-Mallory-Weiss syndrome.(3) Miscellaneous conditions:-*Dermatomyositis.*Myasthenia gravis.*Muscular dystraphy.*Cerebrovascular accident.*Parkinson's disease.*Amyotrophic lateal sclerosis.*Multipifsclerosis.*Diabetic neuropathy.*Alcoholic neuropathy.In the fourth part of the review of literature, the oesphageal motility disorders was discussed in detailes and the summary of this discussion is as follows(A) Oesphageal Motility Disorders in the upper sphincter:(1) Idiopathic pharyngaesophageal "Zenker'sdiveyticlum":a) Aetialogy & pathogenesis:-It is an aquired herniation of

pharyneal mucosa through a muscular defect in the posterior laryngeal wall due to :71)Increase in the intraluminal pressure.2)Congenital weakness in the musculature of the hypopharynx.b) Clinical Features:-L) cervical obstruction toswallowing.2) Retention and regurgitaion of fresh food and saliva.3)NOisy swallowing.4)Feul breath.5)Respiratory complications.6)Nutritional depletion.7)Squamous cell carcinoma is infrequent.(C) Diagnosis:-1)Clinically, unremarkable unless a diverticulum can be palpated as a soft, daughy cervical maps.2)Contrast radiography is the only confirmation in diagnosis.(D) Surgical treatment:--One sta9etranscervical diverticulectomy-Endoscopic, diathermic procedure.(2) Neuromuscular disoders:-Some disease affect oesophageal motility as discussed in the review:-For exam: a) Myathenia grains.b)Myotomia dystrophica.c)Parkinson'S. disease.d)Amyatrophic lateral sclerosis.e)Multiple sclerosis.f)Bulbar poliomyalitis.g)Amyotrophic lateral sclerosis.h)After radical oral laryngeal surgery.(B) Oesophageal Motility Disorders in the body andlower sphincter of the oesophagus:-(A) Hypomotility:-(1) Achalaia of the oesaphagus:-Aetiology:-1)Neuromuscular disorder2)Absence of peristalsis in the body of oesophagus.3)Failure of the lower oesophageal sphincter to relax .* Pathology:1)Spasm in the lower oesophageal sphincter.2)Dilatation and hypertrophy of the body of oesophagus.3)Elongation & herniation of the Oesophagus into the abdomen.* Clinical Course:1)obstruction to swallowing.2)Regurgitation.3)Pain.4)Hugely dilated mesophugus may act as a reservoir for food.5)Pressure symptoms may appear due to presure of the oesophagus on the surroundin9 organs in the mediastinum.* Complications:-1; Small m,,casal ulcerations.2)Aspiration of regurgitated oesaphageal contents. Leading to respiratory complications.3)Carcinema of the oesopha4;us.* Diagnosis:-1)Radiographic examination of oesaphageal narrowing.2)Manometric studies.* Treatment:-1)Medical treatment to eliminate the hyper-selectivity of the ' sphincter to gastrin.2)Forceful dilatationby mechanical, pneumatic or hydrostatic dilators.3) Surgical Treatment:-1) Longitudinal incision of the Oesophagogastric.Junction with transverse closure (Hancke Mikulic 3 careoplasty).2)U-shaped incision extending from the cardia across the oesophagogastric junction with closure forming a wide oesophayogastLic ahast.,masis (Hegrovsky urandall cardioplasty).3)Resection of the lower oesophagus and adjoining part of the stomach witn oesophagoyastrostomy.4)Resectinn of the -cs-Thag-tiastric juncti-n with nesophage.jujunstmy and preservation of most of the s`omah.5)The Heller operation.6)Modified Heller operations.(2) Hypotensive lower sphincter "Hiatus Henia";-* Clinical picture of hiatus hernia:1)Pain in the high epigastric area.2)Burning sensation.3)Regurgitation4)Throught & Respiratory symptoms.5)Dysphagia.6)Bleeding.* Aetiology:1)The positive intra-abdominal pressure & the negative intrathoracic pressure.2)The tendency of longitudinal muscles of the oesophagus to contract.3)Atrophic and flabby muscles of the oesophagus in old patients.4)Congenital malformations of the hiatus.5)Stretching and weakening of the phreno-seesophageal ligament.* Types & classification of hiatus herniaType I:- Sliding or axial hiatus hernia.Type II; Para oesophagial or roling hernia.Type III:- Combined from type I & type II.Type IV :- Complicated type in which other organs such as the colon, spleen, pancreas or small intestine may enter the

hrnial SeCe* Tretment of Hiatus hernia:- a) Medical tretment:-Elevation of the head of the bed.-Weight reduction.-Dietery restriction.-Antacids and other drugs.b) Indication for operations:-?! Very large sliding hernia.-Any para oesophageal hernia.-Severe oesophagitis.-Bleeding - Asperation.-Stenosis - Signeficant functional disorders.-Failure of meical therapy.-Recurrent hernia or ulcer surgery.c) Operative Technique:--Allison techenique.-Belsey technique-Hill technique- Nissen technique.d) Othe operations and Modificaitons:-Discussed in details in the review ofliterature.(B) Hypermotility:1)Diffuse spasm of the essophagus and hypertension of the lower oesophageal sphincter.2)Laalized oesophageal spasm.- Plummer-Vinson syndrome.-Lower oesophageal ring.-Mallory weiss syndrome.