Clinical, para-clinical and therapeutical actualities encountered in acute suppurative pharyngeal infections

SUMMARY OF PHD THESIS

Phd Coordinator:
Prof. Univ. Dr. Ioniță Elena

Phd Student:
Dr. Enăchescu Madălina

Year 2014
Summary

Introduction ........................................................................................................................................2

1. Anatomical aspects of suppurative pharyngeal infections .................2

2. Clinical study of acute suppurative infections of the pharynx.........3
   2.1 Lodge tonsillar phlegmon .................................................................4
   2.2 Acute retropharyngeal abscesses and necrotizing ......................6
   2.3. Lateral pharyngeal abscesses and necrotizing .........................7
   2.4. Diffuse phlegmonous cellulitis (diffuse phlegmon pharyngeal disease Senator) ..................................................8
   2.5. Peri tonsillitis lingual phlegmon ...................................................9
   2.6. Epiglottitis abscess ..................................................................9

3. Histological study of chronically infected tonsils ..............................9

4. Statistical study of suppurative infections throat ...............................10

Conclusions .................................................................................................................................12

Selected Bibliography ...............................................................................................................15
Introduction

The infections located at the level of the palatine tonsils, nasopharyngeal or lingual are frequently encountered and overcoming them leads to the settlement of peritonsillar and peripharyngeal infections. (Infecțiile localizate la nivelul amigdalelor palatine, rinofaringiene sau linguale sunt foarte frecvente iar depășirea acestora duce la instalarea infectiilor periamigdaliene sau perifaringiene.)

Among these, the most frequently encountered localization is represented by the anterior peritonsillar form. Subjective symptomatology and objective examination are the methods that contribute to the establishment of the diagnosis. The instituted treatment is urgently applied. The generating causes of the infections are multiple, but the temperature differences cause by the ingestion of cold liquids or edibles along with low patient immunity can lead to the settlement of these infections. On an immunologically compromised background, peritonsillar and peripharyngeal infections can transform into genuine cervical infections with mediastinal extensions.

1. Anatomical aspects of suppurative pharyngeal infections

The ventro-lateral region of the neck with its lodges and spaces is very important. Within these formations suppurations with pharyngeal or peripharyngeal localization form or fuse. At the cervical region a series of aponeurotic blades divide the anterolateral region of the neck from the peripharyngeal one into a series of lodges and spaces of importance from a pathological point of view. The perivisceral aponeurotic blade is cranially fixed on the prominent bony base of the skull and is caudally continued with the mediastine layers.

In the cranial perpharyngeal region, within the visceral lodge the pharynx is located and outside the perivisceral aponeurotic blade the digastric and stilohidien muscles remain. Dorsally, the visceral lodge is divided through the aponeurotic blades of the ascending pharyngeal arteries into two retropharyngeal regions symmetric towards the median line and dorsally located from the posterior wall of the pharynx.

As a consequence of the intimate report between the tonsil’s palatine epithelium and the lymphoid tissue, the lymphocytes infiltrate the epithelium from the base membrane up to the superficial layers. They dissociate the epithelial cells and cumulate in small cavities named intraepithelial sneath. After an acute inflammation of the tonsils, suppurations of the cellular tissue from the amigdalian lodge can be produced. This constitutes the peritonsillar phlegmone. The infection reaches the lax tissue located between the tonsilar capsule and the wall of the periamigdalian lodge using an lymphatic way or through the periamigdalian crypts as a consequence of the intrusion of the mucosal epithelium[2].

The perivisceral blade with a carotidian starting point separates the cervical region from the anterolateral one into two regions: the visceral lodge and the cervical spaces. The visceral blade, in turn, is divided by the aponeurotic blade of the ascending pharyngeal artery into retropharyngeal and latero-pharyngeal spaces. The lodges and spaces from inside the viscerale lodge are the headquarter of the peripharyngeal
phlegmonous and the cervical regions are the headquarter for the adenophlegmones with a multiple starting point: rinosinusual, oropharyngeal and laryngeal.

The purulent collection can be localized based on the existing adherences between the tonsil and the lodge’s wall, either in the antero-superior side or posterior.

In the retropharyngeal lodge, prior to the axis body (înaintea corpului axisului) two lymphatic ganglions exist, one for each side of the median line. These ganglions have been described by Gillette and they atrophy after the age of 3-4 years. The two ganglions are surrounded by a lax conjunctive tissue that separates the pharynx with its beds (the mucosa, the constrictor muscles, the fibrous tunica) from the prevertebral fascia, the paravertebral muscles and the cervical column. The retropharyngeal space is delimited laterally by Charpy’s the sagittal blades which separates it from the maxillo-pharyngeal space. Downward it communicates with the posterior mediastinum. The ganglions receives the nasal lymphatics, the Luschka tonsil, the Eustachian tube, the middle ear and the dorsal side of the palate[2].

At kids, a retropharyngeal abscess is usually caused by an infection spreading to the lymphatic retropharyngeal ganglions with subsequent phlegmone and forming of abscesses. Fibrosis and atrophy starts in these cases at the age of 4 and ,by the time the child is 6, usually the ganglions have regressed.

At older patients, the infection of the retropharyngeal space appears usually in case of penetrating traumatism or direct spread from an adjacent space.

In the case of lero-pharyngeal suppurations, the parapharyngeal collection is situated outside the aponeurosis and the muscles of the pharyngeal wall (the superior constrictor muscle). The visceral latero-pharyngeal phlegmone is rarely encountered and develops within the prestillian lodge of the neck, between the pharyngeal wall and the conjunctive blade of the big vessels. This is why it is commonly encountered also under the name of anterior abscess.

As a consequence of a catarrhal inflammation of Waldeyer’s ring or of a lesion with a foreign body it can rarely appear a lingual periamigdalita. After a certain stage of inflammation of some lingual folliculi, the infection can spread to the submucous lax tissue and to the gloso-epiglottic space giving birth to the phlegmonous periamigdalita. The median gloso-epiglottic ligament being resistant, the condition remains unilateral.

The hio-epiglottic membrane defends the tiro-hio-epiglottic space and laterally, the infection is limited by the gloso-epiglottic plica. this way the infection can only spread backwards towards the glottis and the laryngeal vestibule [2].

The epiglottic abscess is formed on the lingual side where rich lax cellular tissue that separates the mucosa from the cartilage exists.

2. Clinical study of acute suppurative infections of the pharynx

The acute suppurative infections of the pharynx causes the severe symptoms that alter the overall condition and prognostic these patients. The acute suppurative pharyngeal infections have been caused by infected chronic tonsillitis, infections of dental origin, pharyngeal trauma, infectious diseases or by injuries brought to the pharyngeal mucosa during endoscopic examinations, rarely after tonsillectomy. The acute
suppurative infections of the pharynx are peritonsillar phlegmons, the retropharyngeal phlegmons, the laterofaringian phlegmon, diffuse phlegmon of the pharynx (diffuse phlegmonous cellulitis), peritonsillar lingual phlegmon, abscess of the epiglottis, neck diffuse phlegmon starting point palatine tonsil.

The retrospective study, was held for a period of five years (2006-2010). We included all patients with acute suppurative infections localized pharynx, hospitalized in the Otorhinolaryngology department SJU Craiova. Were recorded: status at admission, clinical and laboratory investigations, treatment evolution. The data were processed statistically and seek to establish a clinical-biological and evolutionary model for these types of suppuration. The study was conducted on 331 patients diagnosed with acute suppurative infections throat, out of 17 440 patients admitted in the Otorhinolaryngology department SJU Craiova between 2006 - 2010. Patients were 207 men and 124 women.

We analyzed the distribution of patients in the study based on years of study, age, sex, origin, season, symptoms, types of onset, associated diseases, physical examination, isolation germs treatment. In each patient we watched history, patient history, medical history, physical examination, laboratory investigations performed and treatment methods used.

2.1. Lodge tonsillar phlegmon

From the study group patients who had lodge tonsillar phlegmons of acute tonsillitis history healed repeated relapses or exacerbations of chronic tonsillitis tonsillitis go unnoticed, the symptoms being deleted from the bottom of a crypt infection transmission to the periamigdalian cellular tissue. I found a history of infectious disease, or oral-dental infections, particularly eruptive accidents of lower wisdom teeth.

Peritonsilar anterior phlegmon

Patients were presented with high fever, painful dysphagia accompanied by ear pain reflex, swallowing, salivation, trismus, voice nazonată, fetid halitosis. The patient refused any food), head position is leaning toward the sick, supported with one hand to relax the neck muscles. [13]. When swelling tonsil region was high, were found and respiratory disorders (dyspnea). [1,4]. After 3-4 days dysphagia is localized on one side and is accompanied by ear pain reflex. [5]

On inspection it was observed deletion angulo-maxillary relief by pulping for cell-node at this level, the area is extremely painful to the touch. Significant local signs were: maximum swelling at the top of the pillar above and Lövete edematous domed cloud, asymmetries isthmus oro-pharynx, tonsil pushed down, back and forth in is enlarged, red, opposite to normal, the rear pillar is normal. Join point yellowish appearance in the curved portion maturation suggests abscess.
Fig.1. Peritonsilar anterior phlegmon

**Back phlegmon (retrotonsillar)**
Missing Trismus but the sore pharyngeal and reflex otalgia are accentuated. Objective and meaningful signs were large swelling in the posterior pillar, red, round, fusiform can sometimes muster interest muster ariteno-epiglottis and amygdala moved forward. After spontaneous or operative drainage of the phlegmon healing occurs quickly, overall development is 10-12 days. Paraclinically we find leukocytosis and neutrophil predominance, increased ESR and C-reactive protein.

**Tonsillar abscess**
The patient has a history of discomfort in swallowing, painful tonsil 3-4 relapses per year with a tendency of unilateralization, dry cough, breath and fetid taste in the neck with periodic removal of granular aspect of chit. The symptomatology appeared and is manifested by intensified recently published in the last 2-3 days dysphagia and odynophagia sided otalgia reflex. On inspection we find slightly painful lymph retroangulomandibulare. At faringoscopie we see: purulent trail amygdala surface, yellowish stain is seen by transparency thinned epithelium, cyst yellowish pink that amygdala surface bulges. Sometimes, we see the presence of inflammatory granuloma in a crypt right. Amygdala in pain is swollen, congested.

**Paraclinical examination of periamigdalian phlegmon**
The laboratory tests consisted of current exploration hematologic (blood count, ESR, glucose, urea, TS, TC, samples dysproteinemia, seroreactii for syphilis, etc). These explorations will indicate neutrophilic leukocytosis and increased ESR). Patients who had abscess perifaringian often had septic appearance and showed varying degrees of dehydration as a result of failure to oral administration of food and fluids. Evaluation of these two entities involved collecting blood for a complete blood count, measurements of electrolytes, and blood cultures. In patients with tonsillitis and bilateral cervical lymphadenopathy, should be considered a Monospot test (heterophile antibodies). If test results are positive, the patient requires careful evaluation of hepatosplenomegalie. Liver function tests should be considered in patients with hepatomegaly]. To facilitate the identification of infectious organisms, a culture of purulent collection be made..
results can help in the selection of appropriate antibiotics, limiting the risk of antibiotic resistance. [6]

**Periamigdalian phlegmon treatment**

Incision and drainage of an abscess is surgically recommended therapy associated with the use of antimicrobial agents. Incision and drainage was performed emergency periamigdalian phlegmon. This is indicated because it gives an indication of the stage of collection allows you to extract a quantity of secretion for seeding, certainly allows for the diagnosis of purulent collection, differentiating it from a form or an aneurysmal vascular tumor [10] guides us on the act operator identifies microbial flora; in most cases it is haemolytica streptococcus. There are no major contraindications to puncture; It is generally an emergency. A relative contraindication would be a phase of diffuse cellulitis. [15]. Penicillin was the antibiotic of choice for the treatment of peritonsillar abscess. Evolution was favorable patients, hospitalization duration ranging from 3 to 12 days.

### 2.2 Acute retropharyngeal abscesses and necrotizing

1. **Adenoflegmonul retropharyngeal the infant and small child.**

   The patient has a history of acute rinoadenoidită. Found symptoms were fever and mucopurulent rhinorrhea (rinoadenoiditei characteristic acute), painful dysphagia and dyspnea (continuous, more pronounced at night), sometimes accompanied by circulation and cornaj, and bouts of sufocatie and vomiting. Dysphagia consistently precedes dyspnea. The child can not swallow not suck milk, sleep is restless, cries are on the nose. Objective is found on the posterior pharyngeal wall a red swelling, fluctuent on palpation. The rear wall is red, edematous and bulges retrovelar. Bulging wall obstruct rhino pharynx and push forward palate.

2. **Retropharyngeal abscess of the adult**

   In history we find the existence of a flu patient, a certain infectious diseases, trauma (foreign body, burning, projectile), an esophagoscopy with mucosal damage hypopharyngeal a neighborhood suppuration (abscess migrating during otomastoiditei suppurated, osteitis of the skull base or the anterior arch of the atlas). Due to the rarity and atypical characteristic features of retropharyngeal abscess in adults, the risk of late diagnosis. [11, 8]

   Leukocytosis with poly nucleos is a common event and may be the initial element of evidence of infection. Definitive diagnosis, however, is determined by radiological studies including projection radiography in the neck profile, neck CT, MRI and ultrasound cervical. [7]

   Surgical drainage remains the cornerstone of management of retropharyngeal abscess, and is done under cover of antibiotics and anti-tuberculosis treatment If there are signs of airway compromise are protected by tracheostomy or intubation before drainage of the abscess. Retropharyngeal abscesses are rare in adults and is a serious emergency A cold abscess possibility should be considered when the infection does not respond to antimicrobial therapy and clinical and radiological characteristics suggest tuberculosis [12].

   The prognosis is generally favorable if identified early and managed appropriately.
2.3. Lateral pharyngeal abscesses and necrotizing

Between 2005-2010 the ENT Clinic of the Emergency County Hospital Craiova were presented 70 cases of phlegmon latrofaringian (0.3%).

The patient’s history I found upper respiratory tract infections - pharyngitis, tonsillitis adenoid, sinusitis, cervical lymphadenitis, infection or extraction of lower molar teeth, tonsillectomy, accidental trauma, ingestion of foreign bodies pharyngeal wall trauma, infection deep cervical space infections rock peak times from externalizing the mastoid tip, the way muscle diagastric (mastoiditis Jugo-diagastrică of Mouret).). As I met the clinical manifestations fever, swelling of the neck, pain, stiff neck, decreased oral intake, trismus. Stridor or wheezing did not install from the beginning.

\textit{Adeno lateral pharyngeal phlegmon}

The history of patients with angina hipereptic adenoflegmon laterofarăngian I found in the course of infectious diseases (scarlet fever, diphtheria, erysipelas), neoplastic tonsillar ulceration, infection of dental origin, suppurations peritonsillar, tonsillectomy. As patients symptoms were presented for high fever, chills, curvature, a moderate dysphagia in Angulo-mandibular lymph node swelling painful, hard, which is then fluctuent which can stretch alsounder the sterno-mastoid. Level-skin swelling is hot and red, and skin and suprahyoid neck shows a congestive edema. neck stiffness and torticollis give latero-posterior head tilt Behind the rear pillar we notice the bulging and swollen tonsil region.

\textit{Phlegmon visceral laterofarăngian (for cell laterofarăngian phlegmon, abscess before)}

Patients with a previous history

- peri tonsillar phlegmon which was punctured repeatedly to find collection, injuring the lateral wall of the lodge tonsil
- Tonsillitis with tonsillar vein thrombosis with extension then in the pterygoid plexus;
- hot tonsillectomy
- tubal tonsil infection through its injury Itard probe brutal non-sterile and operated, can cause a phlegmon in the sidewall of the cavum

Clinical malaise, high fever, dysphagia very painful, the patient with impending feeling of suffocation and not true dyspnea, throat predominant signs (dysphagia) to the neck (torticollis)

Objective was a progressive infiltration suprahyoid region lateral side wall of the pharynx is much swollen, floor of mouth edema presents a slim react without infiltration. Definitive diagnosis, however, is determined by radiological studies including projection radiography of the neck profile, neck CT, MRI and ultrasound cervical. [7]

\textit{Paraclinical examination the latero pharyngeal abscesses and necrotizing (Adeno latero phlegmon pharyngeal phlegmon pharyngeal latero visceral)}

Hematologic and radiologic examinations can determine the presence, extent and location of the infection. Leukocytosis with polinucleoză is a common event and may be the initial element of evidence of infection A definitive diagnosis, however, is set prinstudile including radiography radiological projection of the neck in profile, CTscan cervical and cervical ultrasonography. Cliche radiological profile may reveal bulging anterior pharynx, cervical vertebrae in retro flexion presence, which causes cervical
curvature inversion. Prevertebral soft tissue swelling greater than 7 mm at the second cervical vertebra or greater than 14 mm at the 6th cervical vertebra moving towards pathology retropharyngeal.

Since prevertebral space dimensions may change with the cry, swallowing, expired and neck flexion, a good result depends on making correct radiological technique, requiring the cliché during inspiration and in a suitable position in the patient's neck extension [7]. These demands require limitation of cervical radiograph in a child fearful, agitated. Because of these limitations on the amount of cervical radiography, CT scan of the neck are the most commonly used method for the diagnosis of deep cervical infections [9]. However, although the CT scan can be very useful in assessing the location and spread of the infection, the distinction between cellulitis and abscesses can also always be possible.

2.4. Diffuse phlegmonous cellulitis (diffuse phlegmon pharyngeal disease Senator)

Senator disease is sudden onset and very rapid evolution. The overall condition is profoundly altered: high fever, chills, dysphagia total delirium, complicated septic and asphyxia which may produce death. Objective pulping find a massive neck, the neck is prosconsular with finger pressure gaseous crepitation without renitență or fluctuent. The pharynx appears faringoscopie infiltrated mass red. There is a net collection.

Fig. 2. - Diffuse phlegmon throat with purulent secretions

2.5. Peri tonsillitis lingual phlegmon

During the five years taken in the studio were presented at the ENT Clinic of the Emergency County Hospital Craiova 2 cases of tonsillitis lingual peri phlegmon. The two
patients with lingual peritonsillitis phlegmon had sudden onset after a seemingly trivial angina or a foreign body injuries (Fishbone) with high fever, altered general condition, chills, trismus, dysphagia at the base of the tongue with body sensation foreign ear pain reflex, immobility tongue and soft palate, giving rinolalie and dysarthria, poor oral intake

Objective: there is a jugular lymphadenopathy. On inspection of the pharynx is found oropharyngeal mucosa congestion, pressing the back part of the tongue is extremely painful. On indirect laryngoscopy (difficult to execute) was a red bulge at the base of tongue and epiglottis less lateral masking, occupying valecula. Evolutionary abscess collectes in 5-6 days and can open spontaneously, producing symptom relief.

2.6. Epiglottitis abscess

The onset was sudden, with high fever, chills, sore throat, foreign body sensation hypopharyngeal without respiratory disorders. Maybe start nocturnal meal during a sneeze or a cough effort. Studies show that the abscess epiglottitis occurs more frequently in men than in women 3: 1, with a higher incidence around 45 years. [4]

Risk factors include adult, diabetes, trauma, presence of a foreign body immunocompromised patients. [14]. Abscess epiglottitis mortality rate is low. [3]

On examination the epiglottis is infiltrated hypopharynx powerful red, smooth, almost round, masking larynx. Red or purplish color Lövete sometimes ecchymotic spots, and the peak may occur pultaceu deposit or ulceration covered with false membranes. Previous pillars are edematous.

Treatment consisted of incision and drainage management, administration of parenteral antibiotics and careful monitoring of the airway.

3. Histological study of chronically infected tonsils

If tonsil infections complicated by suppuration peritonsillar and perifaringiene binding was performed at least 3 weeks tonsillectomy. Excised tonsils were trmise pathologic examination to highlight changes of chronic suppurative complications generators. The response of vascular and macrophage type cell reaction was observed.. Microscopic changes were observed with heterogeneous vascular reaction, more frequent and more intense in the connective septa of lymphoid follicles. Vascularization of lymphoid follicles was poor in contrast to the stromal area where the blood vessels were numerous. Lymphoid follicle contains a large number of cells of macrophage clear germinal center and peri follicular lymphoid tissue. Crown follicle is poor in macrophages.

4. Statistical study of suppurative infections throat

The average age was 37.51 years. Maximum frequencies were observed in younger groups (20 to 44 years). Regarding the incidence in age groups individually for each year of study, no significant differences were found, except for 2010 where the average age was significantly higher compared to 2006 and 2009 (41.93 vs 36, 47, p =
Otherwise, the average age and the coefficient of variation did not differ significantly (2006: 36.47 years; 2007: 39.72 years; 2008: 36.5 years; 2009: 34.23 years; 2010: 41.93 years. There there was a tendency to periodicity in the incidence by age groups. We can say that suppurated pharyngeal infections (STI) meet the maximum frequency at ages 35-38 years, constantly.

The average age for the patients with abscess epiglottitis, was 52.27 years for patients with phlegmon of the tonsil lodge - 32.32 years, and in patients with phlegmon laterofaringian - 52.88 years. Statistically, patients with epiglottitis abscess and phlegmon laterofaringian have the same average age (52.27 vs. 52.88; p = 0.25). The average age of patients with phlegmon of the lodge tonsil differ significantly from patients with abscess and phlegmon laterofaringian epiglottis (32.32 years vs. 52.27; p = 0.0013; 52.88 vs. 32.32 years respectively; p <0.0001). This is evident on the chart with the histograms of the three groups of IFS. Curve for patients with tonsillar phlegmon of the lodge being eccentric left (to lower age groups) and FLF and AE - Eccentric right (towards older age groups).

**Figure 3. Histogram of the distribution of patients by age group. Groups were selected location only epiglottis (AE- abscess epiglottitis); lodge with phlegmon of tonsil (FLA) and phlegmon laterofaringian (FLF).**

ISF occurred twice as frequently in males, and at a younger age than in women (35.9 vs. 40.19 years; p = 0.035).

Lodge tonsillar phlegmon and abscesses and necrotizing laterofaringianee are more common in males (twice as frequently in FLA and almost 1.5 times more frequently with FLF). However, there are no statistically significant correlation between clinical forms and sex of patients.

Flegmoanele lodge tonsil and Flegmoanele laterofaringiene were the most common forms of suppurative infections throat, followed by abscess epiglottitis, recorded during the study..

The rarer forms were represented by diffuse phlegmon of the pharynx (FDF); Neck diffuse phlegmon starting point palatine tonsil (FDGAP), phlegmon periamigdalian and lingual (Palfi) and retropharyngeal phlegmon (FRF). This is important because the
number of patients is small, it may be unrepresentative for these types of forms. There is a relatively uneven distribution, with peaks at 3 years. Peaks - in 2006 and 2009 with 72 and 82 cases respectively.

IFS were twice as common in patients residing in rural areas than urban patients (n = 202 vs 129) during the study. There are significant differences between the types of STI in patients from the two environments. Tonsillar phlegmon lodge is the dominant IFS, and is more common in patients in urban areas (78.29% vs 70.79). Latero pharyngeal suppuration ranks second in both groups, but with a higher frequency in patients from rural areas (23.76% vs 17.05%). Abscess epiglottitis is reported with a frequency of 4.45% in rural areas and only 1.55% in urban areas. Although there are significant differences between the number of patients from rural and urban areas, origin does not correlate with the form of IFS.

Generally, a significant correlation exists between the pathogen agent and the localization of the suppuration. Different species of Streptococcus are associated with the phlegmon of the tonsillar lodge (37.3% of the total cases of lodge phlegmone followed, based on frequency, by the S. pyogenes - 27% of the cases). The staphylococcus was isolated in 15.2% of the cases. In the acute latero-pharyngeal suppurations the infections with the pyogenes Streptococcus (31.4%) and other species of Streptococcus (28.6%) are predominant. Staphylococcus is presented in 14.2% of the cases. As a particularity, the absence rate of the microbiological diagnosis is maximum in the case of the tonsillar lodge phlegmons (81.6% from all the cases without microbiological diagnosis were admitted with the diagnosis of tonsillar lodge phlegmon).

Signs and symptoms constantly encountered at all patients with IFS - odynophagia, dysphagia, intense congestion of the oropharynx. Fever, chills and astheny appear with higher frequency but are more closely connected with the infectious-inflammatory syndrome rather than with the type of IFS. Sialorrhea, fetid halitosis, trismus, otalgia, odynophagia, dysphagia and oropharynx congestion are presented in the majority of cases without a clear correlation with a certain clinical form. This fact is explicable through the localization of these infection in the ORL sphere. Signs and symptoms which are correlated with the IFS forms: respiratory failure phenomena, adenopathies in the neck region, modification of pillars and tonsils, glottis edema. Age, without being a sign or symptom is well correlated with the studied forms. The most important combination of signs and symptoms for IFS (indifferently if the clinical form) appears to be given by the association age-lymphadenitis - cryptic and congested palatine tonsils - Lutea edema - pillars congestion - deviation of the palatine tonsil- presence of the point of maximum curving.

The clinique forms are well correlated with the antibiotics used. The choice of antibiotic is dependent on the clinical form. There are three main groups of clinical forms classified on that homogeneity criteria. These groups have received preponderantly certain antibiotics.

The first group (224 patients, 73.7% of the number of the study’s pacients) is formed only from patients presenting tonsillar lodge phlegmon. Penicillin alone had the biggest indication share (77% of the cases) followed by the association with Gentamicin (14% of the cases). In a reduced percentage Cephalosporins were used and

The second group is formed from: the latero-pharyngeal suppurations, the epiglottitis abscess and the peritonsillar and lingual phlegmone. This amounts to 25.4% of
the total number of patients (n=84 from 331). The antibiotic of first choice was also Penicillin (69% of the group’s patients), followed by the association between Penicillin and Gentamicin (20,2% of the group). The third option was Cephalosporins of third generation (9,5% of the group).

The third group is formed from: the acute retropharyngeal suppurations, the diffuse phlegmon of the pharynx and the diffuse phlegmon of the buccal floor. For this category of patients, the first choice were Cephalosporins of the third generation (66,7 % of the group patients). Thus, Penicillin is indicated at 74,3% from the total number of patients. If we add also the association Penicillin and Gentamicin (15,7% of the cases), then Penicillin covers 90% of the 331 patients treated.

**Conclusions**

1. The aggressivity of the acute suppurative pharyngeal infections is emphasized through the activation of the buccal cavity flora. These infections have been caused by infected chronic tonsillitis, infections of dental origin, pharyngeal trauma, infectious diseases or by injuries brought to the pharyngeal mucosa during endoscopic examinations.

2. The gravity of the pharyngeal infection reside in its extension from the pharynx towards the cervical spaces which, because of their continuity with the mediastinum, can lead to septicemia.

3. The incidence of pharyngeal infections over the studied-five-year-period (2006-2010) manifested a decreasing trend from 2.15% to 1,71% for grown ups and from 0,54% to 0,16% for children.

4. By closely following the incidence of pharyngeal infections based on gender differences, we have encountered that 62,54% of the cases have higher predominance in male individuals, while only 37,46% of the recorded cases were feminine-gendered.

5. The most frequent age decade in adults was represented by the 21-23 years-old individuals cumulating to 28.10% of the cases. This was closely followed by the other dades with the following values: 18,73%, 11,78%, 6,35%. In the case of children between the age of 0 and 10 years old only 1,51 % of the case were encountered while for the 11-22 year decade a percentage amounting up to 14,20 was evidentiated.

6. The anatomoclinical forms of pharyngeal suppurations encountered (ordered based on frequency) were represented by the phlegmons of the tonsillar lodges- in 74,32% of the cases) followed by latero-pharyngeal phlegmons (21,14%), epiglottitis abscess
lingual periamigdalino phlegmone and the diffuse phlegmone of the buccal floor (Ludwig-Gensoul angina) - 0.61% of the cases, acute retropharyngeal suppurations and the diffuse pharyngeal phlegmone (diffuse phlegmonous cellulitis)-0.30% of the cases.

7. After a thoughtful analysis of the etiology of pharyngeal infections existing in our repository, sharpened tonsil infections were presented with an incidence of 51.66%. Nasopharyngeal infections (6.34%), peritonsillar phlegmonous antecedents amounting to 5.44% and traumatisms of the pharyngeal wall through alimentary puncturing (0.91%) were also encountered.

8. The symptomatology of patients presenting pharyngeal infections was identical with odynophagia, dysphagia, fever, shivering, fetid halitosis and sialorrhoea in all the cases.

9. The diseases associated to pharyngeal infections were represented by diabetes in 8.16% of the cases and HTA in 6.86% of the cases, which led to a deficitary defense of the sick organism.

10. The positive diagnose established through anamnesis, physical exam, paraclinical laboratory exams (increased number of leucocyte, and increased VSH, cervico-thoracic tomography) imposed an therapeutical attitude.

11. From all the patients, biological analyses were collected in order to evidentiate the degree of infection. For this purpose, the number of leucocytes, the speed of blood sedimentation as well as the secretion of the pharyngeal collection (very important for determining germs and the antibiogram) were considered and tomography indicated the extension of the cervico-thoracic suppuration

12. Chirurgical and medication treatment was applied to all the patients after a previously clinical investigation

13. The incision and the drainage of the peritonsillar phlegmone was performed on an emergency basis without prior paraclinical investigations.

14. The germs involved in pharyngeal infections isolated from the pharyngeal sectrections were the following: streptococ 68.20%, Stafilococ 20.49%, Haemophilus 2.47%, Pneumococcal 2.83% , Bacteroides, Peptostreptococcus, Fusobacterium 1.76%, Enterococ 0.35%, Mycoplasma pneumoniae and Klebsiella 0.71%.

15. Lateral pharyngeal suppuration received after comuter tomography investigation, surgery delayed

16. Patient evolution was favorable thought daily opening of the pharyngeal suppuration and antibiotic treatment. The healing process took between 5 to 7 days.
17. For the retropharyngeally or cervically - extended suppurations daily grooming along with local application of antiseptic substances and sterile bandages were daily applied. Antibiotic treatment was administered in a general way and a nutrition probe for 14 up to 21 days was used.

18. The tonsils responsible for generating peritonsillar phlegmones that were subsequently extirpated presented were histopathologically analysed. The tonsils presented histological modifications with scratchy vascular reactions (more frequent and more intense in the conjunctive septum between the linfoide folliculi). Vascularization of lymphoid follicles was poor in contrast to the stromal area where the blood vessels were numerous. Lymphoid follicle contains a large number of cells of macrophage clear germinal center and perifollicular lymphoid tissue. Crown follicle is poor in macrophages.

19. Statistical evaluation of patients in the study revealed that the signs and symptoms that correlate with pharyngeal suppuration forms were phenomena of respiratory failure, lymphadenitis, modification pillars and tonsils, epiglottis edema. It was also shown that antibiotic selection is made on the basis of clinical and / or laboratory. First-line antibiotic was penicillin indicated in 90% of cases alone or in combination with other antibiotics, followed by broad-spectrum cephalosporins.

20. Through close monitoring of the patients with pharyngeal suppurations, complications at the parapharyngeal and mediastinum areas can be avoided.

21. Good knowledge of the topographical anatomy of the pharyngeal and cervical mediastinal regions is mandatory and indispensable for solving the suppurative laryngeal pathology.

22. Correct diagnosis and fast therapeutical intervention highly contribute to the successful healing of the pharyngeal infection indifferent of the etiology and location.


3. Harvey, Matthew BMEd; Quagliotto, Gary MBBS, FRCPA; Milne, Nathan MBBS, FRCPA, IFCAP Fatal Epiglottic Abscess After Radiotherapy for Laryngeal CarcinomaAmerican Journal of Forensic Medicine & Pathology: December 2012 - Volume 33 - Issue 4 - p 297–299


14. Tanthry Deepalakshmi* ; Devan PP; Manjunath Prasad An Unusual Case of Acute Epiglottic AbscessArticle 10, Volume 26, Issue 74, January 2014, Page 56-56

15. Tomescu E., Urgențe și manevre în practica ORL de cabinet, Ed. Dacia, 157