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**Diagnostics of deep phlegmon of neck area, complicated by sepsis**

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**Summary:** The article describes a clinical case of diagnostic and successful surgical treatment that was made possible by succession of doctors, patient was received with neck phlegmon, complicated by sepsis.

**Key words:** deep neck phlegmon, succession of doctors in diagnostics.

**Topic urgency:** Nowadays problem of diagnosing purulent phlegmon in neck area opportunely remains difficult and urgent/

**Introduction:** Aetiology and pathogenesis of neck phlegmon is anaerobic infection: peptococcus, bacteroids, clastridium, etc. that can exist without oxygen. Penetration of these infections into crumby neck areas between fascias provides for emergence of pus in deep layers and bears a serious hazard for life of a patient. Depending on localization surficial and deep phlegmons are distinguished. Deep neck phlegmon is a serious and dangerous disease.

According to bibliographic sources, 51% of phlegmon cases happen in “vascular” space of neck and flow without or with slight expression of local and general symptoms that are typical for heavy suppurative processes. Acute and sub-acute forms of pathology are distinguished, the basic forms of it are: sulphureous, purulent, putrefactive, necrotic, anaerobic, and fulminant. At the same time pus exceeds limits of one location, and damages adjacent areas, develops clinic of heavy intoxication and carries malignant nature, and patients die of it within 2 days.

A patients would usually come to doctor of general practice or ENT doctor with complaints for pain during swallowing high temperature, sometimes heavy production of saliva, but there is no clinic of inflammatory process (skin hyperaemia, oedema) on skin surface in the neck area, at the same time, the patient’s condition is severe. The method of phlegmon diagnostic in deep neck area is radiography of neck in side projection and CT. The only method of treatment is surgery with external access straight after establishing diagnosis, prescription of antibiotics with wide activity spectrum in high doses, desensitizing preparations, and vitamin therapy.

Goal and objective of our work: According to experience of many years, we can state that any general surgeon have treated phlegmons in different areas of body, but experienced difficulties regarding diagnostic of deep neck phlegmon. We decided to share experience on succession of doctors in terms of diagnostic of deep neck phlegmon that presents certain interest for all

clinicians: otolaryngologists, surgeons, and other doctors. There are a lot of examples in practice of surgeon work, we present only one of them.

**Clinical example:**

Patient A.G., born 1990 applied to district doctor on 11.10.2015 after lunchtime, no expressed pathology, ENT doctor takes patients to assistant surgeon of general practice department, the patient suffers from general weakness, high temperature during the recent 4 days. Objectively: tachycardia, no changes of skin in neck area, frequent spitting, condition of patient is very severe. Cabinet of radiography did not operate in the clinic at the time. Via emergency service the patient was delivered to emergency clinic “Medical center of Western-Kazakhstan State Medical University of Marat Ospanov with diagnosis “Deep phlegmon of neck, complicated by sepsis”.

While studying stationary card №11760 after discharge of the delivered patient A.G. born 1990 we notice that surgeon of reception changed diagnosis at the moment of delivery on 11.10.2015 at 16-30 to “Neck lymphadenitis, neck phlegmon?” Hospitalized into surgical department, the history contains symptoms of expressed intoxication – weakness, indisposition, increase in temperature, headache. Blood analysis: leukocytosis for formula disposition to the left, increase in ESR up to 40 mm/hr. The patient was examined on 12.10.2015: associate professor, head of surgical and ENT department prescribed additional radiographic examination of chest area and CT, conservative treatment, but condition of patient did not improve after the treatment. No growth in blood sowing for sterility was registered during the first days. In the evening of 12.10.2015 assistant of general practice department who examined the patient and directed her on 11.10.2015 advised young professor of surgical clinic on phone regarding the diagnosis of patient – deep neck phlegmon, complicated by sepsis, and advised that she requires urgent surgery. In the morning of 13.10.2015 results of CT confirmed the diagnosis in the medical center of WKSMU, the conclusion was: “CT picture is typical for phlegmon of near-digestive fiber” and radiologically – purulent pleurisy in the left.

Puncture of chest and drainage according to Bullau was implemented to the patient under local anaesthesia. Then on 13.10.2015 surgery was undertaken under incubation narcosis – autopsy of deep phlegmon, the ulcer was located in the area of vessel tracts of the neck in its left side, drainage was made after aspiration and toilet.

The patient remained in reanimation department for 5 days where she was treated with massive antibacterial, desensitizing therapy, dry plasma, etc. The neck wound was toileted, aseptic band was replaced daily. Drainage was removed as pus discharge from the left neck and chest area stopped. Sawing from phlegmon: golden staphylococcus, blue pus bacillus. On day 6 the patient was transferred to surgical department where the treatment continued. After the wound was

cleaned of pus content, delayed stiches were placed. Patient A.G. was discharged from the hospital on day 32 in satisfactory condition for the further ambulatory treatment. Sulfureous discharges ended after several bandagings. At the moment of discharging to work scar in the left neck area along the front edge of m.sternocleidomastoideus remained, painless for palpation. The closest and remote results are good.

**Resume:** Success of treating this patient with diagnosed deep neck phlegmon, complicated by sepsis was defined by opportune diagnostic, succession of doctors, detailed inspection of CT and radiology with chest graph, adequate surgical intervention, and complex conservative treatment.

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