Patient with double cancer – successfully treated

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INTRODUCTION:

The etiology of thrombosis in malignant diseases is multifactorial, and mechanisms that lead to thrombosis include release of the procoagulants from tumor cells (PC), factor related to bed rest, infections, as well as oncological therapy – chemotherapy, hormones, radiotherapy and surgical treatment. Thrombocytosis has frequently been found to be associated with various malignancies.

CASE REPORT

A female patient aged 53, farmer. She was hospitalized at the Institute of otorhinolaryngology and maxillofacial surgery Clinical Centre of Serbia (Inst ORL MFS CCS) because of hypopharingleal cancer with metastasis in the left neck. Her state was complicated with deep leg vein thrombosis and pseudomonas infection. Persistent thrombocytosis in laboratory monitoring indicated more adequate diagnostic procedures, which led to discovering of Chorioidal Malignant Mellanoma as a second cancer. She was treated: surgically, with antibiotics, with anticoagulants and radiotherapy. Patient was discharged from the hospital in good health condition, free of any other symptom of the malignant disease. Conclusion: Presence of thrombocytosis and idiopathic thrombosis can suggest occult malignancy. It would be prudent to further evaluate the relationship of thrombotic events, thrombocytosis and head and neck tumors. We suggest anticoagulants to prevent thromboembolic complications, affect the angiogenesis and prevent development of metastatic disease. It may lead to lower mortality rate.

Key words: thrombosis, cancer, hypopharings, chorioidea, anticoagulants

INTRODUCTION:

Liability to thrombosis and embolism represents an important problem associated with cancer, although there are no evident haemostatic disorders. Malignant cells may activate the coagulation system: either directly – influencing thrombin production or indirectly through stimulation of the mononuclear cells to synthesize and secrete different procoagulant substances. The patients necessitating surgical treatment of the cancer are particularly prone to thrombosis and embolism within carcinoma therapy which makes the postoperative risks significantly higher. Radiotherapy and chemotherapy also increase the risk to thrombosis in cancer patients. Drug therapeutic regimen in cancer cases of acute thrombosis includes the application of fractioned and unfractioned heparins and oral anticoagulant therapy (OAT).1

Values of antitrombin III were within reference values (97%). In absence of tests for controlling of the activated factor X (FXa), prothrombin time (PT) and activated partial thromboplastin time (aPTT) were used. The PT, normalized to the International Normalized Ratio (INR) is used to monitor oral anticoagulant drugs Acenocumarol
and Warfarin. Long term target INR range was 2.0-3.0 (malignancy as persistent risk factor for DVT). Treatment dose was Dalteparin 200 IU SC Q 24hr.

PT and PTT were performed by commercial Behring tests.

Persisting the lasting thrombocytosis led the doctor’s team to additional diagnostic procedures, that evidenced eye tumor. After seven days of treatment and coalescence period and switching to peroral feeding, oral anticoagulant therapy (OAT) Acenocumarol tablet was gradually introduced. Radiotherapy was not applied within the optimal time period due to the complications during postoperative period. Therefore, tumefaction developed on the left side of the neck, and the patient was surgically treated again. Radical dissection on the left side of the neck was performed. HP result indicated of metastasis of the squamous cell carcinoma in the soft tissue of the neck. Diagnosis was confirmed with immunohistochemistry: tumor cells are positive for cytokeratin and negative for HMB-45. Postoperative recovery was uneventful. Owing to the course of the underlying disease complicated by recurrere thombophlebitis, the patient was carefully laboratory monitored (INR, aPTT) and treated with Dalteparin sodium and OAT Warfarin sodium was gradually introduced. The patient was discharged without any clinical signs of acute phlebothrombosis. Tumor Board reached the decision to apply radiotherapy in postoperative period. At the end of clinical exploration enucleation was done and HP result was the following: Chorioidal Malignant Mellanoma – transversial penetration. Complete clinical and diagnostic evaluation confirmed that the patient was free of any other symptoms of the disease involving other tissues and organs, in addition to those already mentioned. Now, eight months after all the applied therapeutical modalities patient’s clinical condition is good. (graph 1)

**DISCUSSION**

This case proves that etiology of thrombosis in malignant diseases is multifactorial, and mechanisms that lead to thrombosis include release of the procoagulants from tumor cells (PC), factor related to bed rest, infections, as well as oncological therapy – chemotherapy, hormones, radiotherapy. There are several mechanisms which can activate coagulation in case of infection: endotoxin directly activates factor XII, induces reaction of releasing in thrombocytes, causes damage of endothelium and starts releasing of procoagulant materials from granulocytes. Development of thrombosis during second hospitalization, in spite of the treatment, along with development of thrombocytosis, indicated more adequate diagnostic procedures, which led to discovering of Chorioidal Malignant Mellanoma. Hypercoagulability states (thrombophilia) and thrombosis can appear several months, even years before tumor diagnosis. Patients with cancer have twice as high risk for deep leg venous thrombosis than the patients without malignancy. It is well known that malignancy incidence is highly related to coagulation disorders and appearance of thrombosis. Appearance of venous thromboembolism can be indicative of undetected occult carcinoma which increases the possibility of early detection, healing, prolonged survival. In solid tumors the vitamin-cancer-procoagulant, which is vitamin-K-dependant enzyme, may have a key role in antimetastatic effect of warfarin. Currently available studies suggest anticoagu-
lants as therapeutic and prophylactic agents in carcinoma patients, since they prevent thromboembolic complications, affect the angiogenesis and prevent development of metastatic disease, while the others suggest lower mortal-
ity among carcinoma patients treated with heparin and low molecular weight heparin.

CONCLUSION

We have selected a patient with such a diverse clinical symptoms in order to remind our colleagues on the possi-
bility of the clinical situations associated with treatment of patients multiple diseases that maybe cured only by team efforts. It must be stressed that the patient is highly moti-
vated, willing to cooperate with medical team, with ex-
tceptionally stable psychologically constitution. Our re-
port is only a small contribution to more reliable clinical practice, when our mutual efforts result in patient’s sur-
vival. So, don’t forget:

In malignancy treatment, combined with all the above stated complications, causal approach is certainly the best one: extirpation of the whole tumor whenever possible, and treating of infection according to susceptibility test using the most efficient drug.

In patients with idiopathic thrombosis there is a possi-
bility of occult malignancy, and thus it is necessary to di-
rect diagnostic methods accordingly. Presence of periph-
eral blood thrombocytosis can also suggest presence of malignancy. Preoperative thrombocytosis suggest possible metastatic disease and implies choice of diagnostic pro-
ducts which will evidence metastatic changes with high level of accuracy.

Appearance of hypercoagulability in coagulation tests without clinical manifestations of illnesses presents: the marker for possible existence of malignancy, and, if there is the malignancy, marker of malignancy progression. Anticoagulant treatment prevents appearance of throm-
boembolic complications (infarction, cerebrovascular in-
sult and embolism) and stops malignancy progression.

Within the preventive approach to thromboembolic states the drug of choice is warfarin, which maintains INR

values within the range of 2,0-3,0 for cancer patients. Within therapeutical approach to thromboembolic states drug of choice is LMWP.

The most contemporary treatment of malignancies in-
cludes multidisciplinary approach and translation of labo-
ratory conclusions in clinical practice.

REZIME

PACIJENT SA DVA KANCERA – USPEŠNO LEĆENJE

(prizak slučaj)

Uvod: Etiologija tromboze u malignim oboljenjima je multifaktorijalna. Mehanizmi koji vode do tromboze uključuju otopuštanje prokoagulanata iz tumorskih celija (PC), rizike koje nosi dugotrajno ležanje, infekcije, kao i onkološka terapija- hemoterapija, hormoni, radioterapija i hirurško lečenje. Pojava trombocitoze je često udružena sa raznim malignitetima.

Prizak slučaja: 53-godišnja bolesnica hospitalizovana zbog kancerca hipofarinska sa metastazama na vratu levo.


Ključne reči: tromboza, kancer, hipofarinks, horioida, antikoagulanti

BIBLIOGRAFIJA