DIAGNOSIS AND TREATMANT OF BLADDER CANCER

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Abstract: The modern way of life, stress during the work process, irregular diet and bad health habits, are of particular importance in the appearance and development of neoplasms, ie tumors, which depending on their character, location, invasiveness and growth in tissues or organs, can be benign and malignant, or so-called. cancers. The age of the patients is no longer the limit and the rule for their occurrence, so today we can find cases from the youngest to the oldest with the same or similar pathology, but the approach to therapy is always individual on a case-by-case basis and independent of each other. The history of the disease in our patient dates back almost 30 years before the diagnosis of bladder cancer in March 2019, ie with previous intervention and removal of nephrolithiasis (kidney stones), decreased renal function of the left kidney and atrophy of the renal parenchyma. The patient is 57 years old and for almost four years has been receiving therapy for enlarged prostate, as well as occasional antibiotics for frequent urinary tract infections, in addition to regular antihypertensive and chronic therapy for diabetes (Diabetes mellitus type 2). With the onset of intense pain during both urination and rest, microbial infection with Escherichia coli in the urinary tract is established and the patient takes high doses of antibiotics for 4 to 5 months to reduce antibody titer. After an ECHO examination of a small pelvis at a urologist, with confirmed prostate hyperplasia and fever, with elevated biochemical and hematological parameters of the blood count, as well as tumor markers of interest, he was immediately referred for examination and treatment at a university clinic. Due to the complexity and urgency of the patient's condition, but also the poor organization in the health system, he was transferred to a private clinical hospital, where after computed tomography of the abdomen and small pelvis, bladder cancer was diagnosed and transurethral ablation was performed immediately, and biotated material sent for pathohistological identification. As the intervention did not give positive results to improve the patient's health, but on the contrary, led to deterioration, the next day the intervention was performed again (classical) with complete removal of the bladder, prostate and several local lymph nodes, which were sent for histopathological analysis, and the patient was recovering with a urostomy of the anterior abdominal wall. Written after only a few days in April 2019, with a good and orderly general clinical picture, with orderly immunological and biochemical results within the normal range during the subsequent control examinations, and in consultation with specialists (oncologist), he was referred to chemotherapy after two months from the intervention. It starts according to the planned program in June 2019, but manages to receive only one full cycle of the planned four, and at the beginning of the second cycle it exists at the age of 58. Taking care of personal health, habits and discipline should be a priority for everyone, and patient care should be imperative for every medical professional, at any time of the day.

Keywords: health system, urinary tract infection, bladder cancer, chemotherapy.

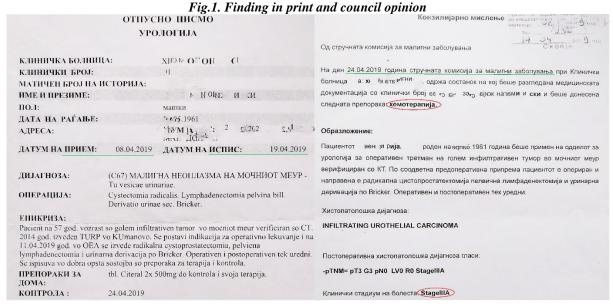
1. INTRODUCTION

The long-standing habit of an active smoker, the consumption of large amounts of caffeine, the daily exposure to stress, as well as the gourmet diet of our patient, born in 1961. in Kumanovo, otherwise a mechanical engineer by vocation, contributed to the rapid deterioration of health in the last few years of life. Due to nephrolithiasis in the left kidney, at the age of 20 it becomes dysfunctional and subsequently atrophies over the years (ECHO examination), and on the other hand the right one hypertrophies. As he approaches the age of 50, he develops high blood pressure and diabetes, initially treated with Tab. Metformin 850 mg 3x1 in 2010, and later in 2014, to be replaced by Tab. Glucophage 500 mg 3x1, and additionally with Insulin (Humulin N) 6 pens per month according to the breakfast and dinner scheme, from the 2017. Antihypertensive therapy is continuous with tab. Bipreso 2.5 mg 1 + 0 + 0. In April 2014, a transurethral prostatectomy (TUR-P) was performed without complications and difficulties due to benign prostatic hyperplasia, pelvic discomfort, and occasional haematuria, and he received postoperative antibiotic therapy (also isolated Escherichia coli infection). At the age of 55, in January 2015, the history of the patient recorded hematuria after TUR-P, when an antibiotic was prescribed, made a micro and macroscopic pathohistological preparation of 40 ccm material with red-yellowish liquid, and according to the analysis is classified in Group 2 of inflammation. After only a few months, in April 2015, exploratory cystoscopy was performed on TUR-P due to

severely inflamed prostatic box, inflammation and purulent adhesions on the bladder mucosa, and acute cystitis, and antibiotic therapy was continued postoperatively. [4,8] In June 2015, due to an umbilical hernia, a hernioplasty was performed, and it was written two days after the intervention in general good condition without complications and other abdominal difficulties. Responsibly and self-disciplined appears at regular scheduled check-ups and examinations at the family doctor and private urological clinic, until the sharp deterioration in early 2019.

2. METHODS AND RESULTS

Frequent urinary tract infections, even after their cure, can leave long-term consequences on the mucosa of the urogenital tract as well as a general weakening of the body's immune system. After several months of antibiotic therapy in the winter of 2018, our patient experienced severe pain when urinating, a slight rise in blood pressure and body temperature in the spring of 2019. During the examination in the private urological clinic, hematuria and body temperature of 38°C were noticed, which continued to rise continuously. He was immediately referred for examinations with planned hospitalization in the University Clinic of Urology in Skopje, but for technical reasons, ie no appointment for examination and possible intervention consequently, he was returned to the home clinic with a prescribed antibiotic. Only a few days later (2-3), with the antibiotic therapy just started per os, the patient notices a pronounced hematuria followed by pain and constant fever, after which he was admitted on his own initiative and urgently to a private clinical hospital in Skopje. On April 3, 2019, with pain when urinating, fever, hematuria, high blood pressure, on ECHO examination was found a preserved parenchyma of the right kidney without delays and calculi, and the left with reduced parenchyma and dilated duct system, as well as residual calculosis. A large organized coagulum and orderly capacity was detected on the bladder, and a small prostate, post TUR-P, with a smooth capsule, directed to CT of the small pelvis. After the obtained results from the computed tomography of the abdomen and small pelvis, on day 8.04.2019, he was admitted to the department with referral Dg. Haematoma vesicae urinarie post-TUR-P and with a plan for Op. Cystotomy et evacuation haematoma vesicae urinarie, performed on the same day. The very next day after the successful and orderly performed operation, Ablatio tumoris vesicae urinaria, and the result obtained from the pathohistological laboratory of the sent material. which indicated developed infiltrative bladder cancer, a radical bladder cystectomy with the prostate and the local lymphatic nodes (Cystoscopia radicalis sec.Bricker). [1,3,6] The new type of bladder in the patient was a sac of the anterior abdominal wall, on the outside, glued with a urethrostomy, and they are of limited use, easily available in pharmacies like a packet. The patient was discharged a week later in good general condition, contactable, oriented, moody, and mobile.



After determining the degree of malignancy of the cancer by the pathologist, ie Stage IIIa, at the next examination, a conciliation commission was formed together with oncologists and the patient was recommended chemotherapy according to the protocol. [11,12,14] According to the international classifications and protocols, no metastases were found in the surrounding lymph nodes in the determined grade of the examination material, with orderly blood (biochemical) analyses, with an orderly echocardiographic finding and ejection fraction of

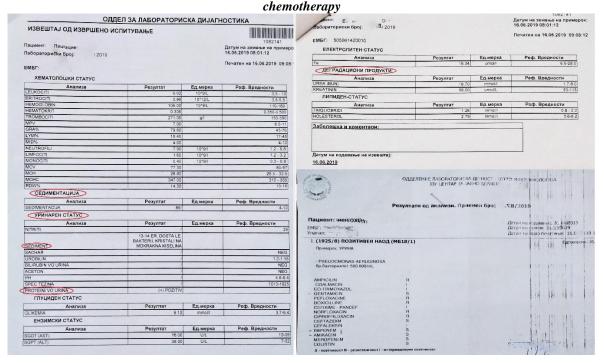
myocardium with 70%, normal dimensions of the ventricles and the AV valve, microbiological, endocrinological examination and the all complexity of the entire history of the patient as well, the chemotherapy was started on 30.05.2019

in PHI UCRO, Skopje.

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At the end of the first cycle of chemotherapy, which took place in eight days arranged according to a scheme and protocols according to international standards, while also receiving regular therapy for chronic diseases, the patient underwent laboratory tests of blood and urine, as well as microbiological for determination. of the health condition before the start of the planned second cycle of chemotherapy. Biochemical and haematological analyzes of blood showed almost correct results, or close to the reference values, but urine (as well as microbiological) examinations confirmed Pseudomonas aeruginosa infection, and antibiotic therapy was prescribed according to the antibiogram, per os during next 14 days.

Fig.3. Biochemical analysis of blood and urine with microbiological findings after the end of the first cycle of



With the improvement of all blood parameters, orderly urinary status, stable blood pressure, regulated diabetes mellitus 2, at the beginning of July 2019, the second cycle of chemotherapy was started according to the protocol, but it was not completed until the last dose.

Fig.4. The second cycle of chemotherapy at PHI UC Radiotherapy and Oncology Skopje извештај извештај Специјалист / Супспецијалис Специјалист / Супспецијалис Избран лекар п Избран лекар гин СУБСПЕЦИЈАЛИСТИЧКИ/ ИНТЕРСПЕЦИЈАЛИСТКИ ПРЕГЛЕД СУБСПЕЦИЈАЛИСТИЧКИ/ ИНТЕРСПЕЦИЈАЛИСТКИ ПРЕГЛЕД Дијагностичка лабораторија 2 Дијагностичка лаборатор C67 C67 ating urotelial carcinoma St.post Cystecton elial carcinoma St post Cystectomiam radicalis et Lymphadenectomiam pelvina bill.Derivatio pTNM=pT3 pN0 pMxL0V0 R0 Stage IIIA St.post chemoterapiam N I DIABETES MELLITUS. pTNM=pT3 pN0 pMxL0V0 R0 Stage IIIA St.post chemoterapiam N I DIABETES MELLITUS. Пабораторија уредна. Денес ке се реализира прв ден од ВТОР циклус на хемотерапија по ЦГ протокол тем. По 0 Крына слича со уреден наод Кај пакинтот денисе треба да се реализра 8-ми ден од ВТОР циклус по Ц/Г протокол Во макинтов на УКРО нема Аплицирана терапиіа: Аплицир терапиіа Упатство за понатамошн пекување итропа по договор ациентот ќе биде информиран по телефон за ординирањето на циклусо Форма, решня сигнетура, ерег Amp. Gemcitabine a 1900 mg Drag. B complex 09.07.2019 Датум на 02.07.2019 14 М.П.

In anticipation of the last prescribed dose of the second cycle, after almost two weeks, the patient's health deteriorates dramatically and he is immediately hospitalized in a private hospital. After several days of intensive treatment, he was discharged in relatively good clinical condition to continue chemotherapy. During the general examination and complete blood analysis in PHI UCRO, ten days after the examination there is a dramatic deterioration again, after which the prescribed therapy is prescribed for a home visit.

Fig. 5. Hospitalization due to deterioration and recommendation for therapy at home отпусно писмо **УРОЛОГИЈА** КЛИНИЧКА БОЛНИЦА клинички број: МАТИЧЕН БРОЈ НА ИСТОРИЈА: :AUK# име и презиме KUIROIII 18 н tи ДАТА НА РАЃАЊЕ: АДРЕСА: -4.5.1961 УДЖе МИНОДЗАМ ДАТУМ НА ПРИЕМ: 26.07.2019 **ДАТУМ НА ИСПИС:** дијагноза: 67) МАЛИГНА НЕОПЛАЗМА НА МОЧНИОТ МЕУР . post cystoprostatectomiam radica . Bricker, St. post hemoterapiam. ОПЕРАПИЈА: ЕПИКРИЗА: m dojde do podobruvanje na sostojbata. Se ispisuva so dobra opsta rapija i kontrola.

Inijenem 3x1 (n.a. 8 casa po 1 gr vo influzija)

Amilicacin 2x1 (n.a. 12 casa po 1 gr vo influzija)

Amilicacin 2x1 (n.a. 12 casa po 1 gr vo influzija)

thi. Furosemid 2.x 1/2 (n.a. 12 casa po 1/2 (b1)

thi. Xarelto 1x1 (n.a. 12 casa po 15 mg)

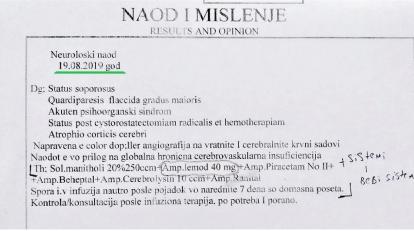
thi. KCl. 3x 500 mg

Vitamini/ tecnosti na usta ПРЕПОРАКИ ЗА

One week later, with a slight improvement in the general condition at home, on 15.08.2019, after a heteroanamnesis from the wife of the university clinic, the symptomatic therapy was continued and the last dose of chemotherapy was planned, in order to complete the second cycle, of course performed during home visit by a specialist. The continuing deterioration of the patient's health, with his reduced contactability, mobilizes the family to seek examination on their own initiative from a neuropsychiatrist on August 19, who diagnosed severe cortical atrophy and therapy at home.

It was performed only one day, because on the second day, August 21. 2019, the patient died at the age of 58.

Fig.6. Last examination at home by a neuropsychiatrist



3. CONCLUSION

By eliminating bad health habits, such as smoking, and practicing a healthy active lifestyle, we contribute to the general well-being of our own health and that of our loved ones.

4. PURPOSE

Shortening the diagnostic path through examinations, in the labyrinths of the health system.

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