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The difficulties of secondary prophylaxis of cervical cancer in women suffering from paranoid schizophrenia – a case study

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Summary

Cervical cancer constitutes 5.32% of all malignant neoplasm cases, it is the sixth most common condition of the cancer type and it is an important problem because of its medical, epidemiological and social implications. The aim of primary prophylaxis is to reduce the number of new cases, while secondary prophylaxis is to provide early diagnoses and treatment of cancer cases. The aim of this work is to present the case of 55-year-old woman treated with chronic paranoid schizophrenia whose gynecologist refused to collect biological material for cytological evaluation. The patient was diagnosed with carcinoma planoepitheliale (G2), then treated surgically and qualified for adjuvant-radiological treatment. Despite the good mental state and a psychiatrists' statement (treating the patient for many years) of the absence of contraindications for hospitalization, a gynecologist-oncologist refused to admit the patient to the ward in fear of a threat to other patients and decided on outpatient palliative treatment of the patient. Finally, radiologist-oncologist performed the complete cycle of irradiation in order to cure the patient. While looking for possible reasons of cervical cancer development in individuals with psychotic disorders, all the possible carcinogenic factors have to be taken into account. Nulliparous women and virgins treated for mental illness must not be denied screening examinations related to cervical cancer. Despite the changes, also related to the implementation of the mental health program, people with mental disorders with underlying physical illness are still stigmatized, even by a higher medical personnel. Moreover, mentally ill patients are denied proper treatment in accordance with the current state of medical knowledge.

Key words: schizophrenia, stigmatization, cervical carcinoma

Introduction

For years, cervical cancer has been an important problem in Poland, both because of its medical and social implications. Even though the access to diagnostic and prophylactic tests is becoming more and more widespread, apprx. 3,450 new cases happen every year. In most cases, the condition is in developed stage, which negatively affects the treatment results. Cervical cancer is the sixth most common condition of the cancer type and constitutes approx. 5.32% of all malignant neoplasm cases in women. Even though the overall number of cancer cases are on the rise, the frequency of cervical cancer is relatively stable [1].

Most endometrial carcinoma cases are preceded by an incorrect development of the mucosa, even though some happen without any earlier atypia (1.6% of patients) [2]. The more advanced the disease is upon diagnosis, the worse are the prognoses. In the case of invasive cervical cancers, in Europe approx. 62% of patients survive for the average 5 years, while in Poland 51.5% [3]. The aim of the primary oncological prevention is reduction of the number of new cases while the aim of secondary prevention – early diagnoses and treatment of cancer cases. Experts suggest that women aged over 21 and those who had started to be sexually active at least three years earlier should be subject to these examinations. Since 2006, a program for prevention and early detection of cervical cancer is being implemented in Poland. Its effects will become visible in approx. 20 years' time. Healthy women aged 25–59 are directed to screening examinations that may reveal cervical cancer. The screening program involves regular examinations conducted every three years. In 2010, only 9% of Polish women responded to a personal invitation to screening that had been sent to them, while the program of population screening (financed by public funds) attracted the attention of 25% of Polish women [4]. Phoenix et al. (2014) assessed the effectiveness of screening examinations in detecting various cancer types in individuals with severe reactive psychosis. A cytological screening in individuals that meet the criteria for a screening test have revealed cervical cancer in 40.5% of subjects [5].

Case study

A patient aged 55, single, childless, holding a secondary education degree, since the age of 23 treated for paranoid schizophrenia (according to ICD-10), totally incapacitated (her brother is her legal guardian). So far she has been hospitalized in a mental hospital a few times. After reaching the age of 45, she has been hospitalized at care and curative institution for mentally ill patients. Earlier, she had been living with her parents. The patient was directed to the institution after the death of her mother, who died because of cervical cancer. Her father, aged 85, was reported to have mental health disorders but he remains uncritical about it. The woman has a brother, who is two years older than she. The patient is independent but requires some encouragement and

supervision while taking care of her day-to-day activities (e.g., hygiene). The interview revealed a linear, protracted and relatively mild course of the schizophrenic process. The clinical picture contains some positive symptoms: cognitive slippage – she tends to utter some delusional sentences, active avoidance of interpersonal relationships, showing little interest in both herself and the surrounding world, and she is quite well adapted to social life. Normal appetite was reported. Sleeping patterns are regulated pharmacologically. The patient has been smoking cigarettes for many years, around 20 cigarettes every day. She has never been treated for chronic somatic diseases before. Because of her paranoid schizophrenia, she has been taking olanzapine (20mg/day) for two years.

During psychiatric examination, the patient was reported to have normal autopsychic and partial allopsychic orientation (she was not able to provide an exact date – the day of the month). She is not willing to maintain eye and verbal contact, trying to leave the examination room as soon as possible. When asked, she provides curt answers, with simple, single sentences. She denies having any severe symptoms or somatic disorders. Her affect was flat, poorly modulated. She had regular periods, every 30 days until 50 years of age.

The psychiatrists working at the curative institution referred the patient to a unit suggested by the National Health Fund, in order to undergo cytological examination. She fulfilled the requirements for participating in the program for early detection of cervical cancer. After taking history, the doctor denied to collect her biological material, claiming that "the patient had neither had a sexual intercourse nor given birth to children". Yet, the patient was referred to another healthcare unit where a smear test was done. The examination revealed the presence of squamous epithelial cells. After additional examination, a final diagnosis was provided: carcinoma planoepitheliale, G2. A laparoscopic hysterectomy with adnexa removal (using Meigs' method) and axilliary limfadenectomy were conducted. During an observation on a gynecological ward, no changes in patient's behavior or functioning which would distinguish the patient from other people staying in the hospital ward, were reported. Further on, the patient was referred to an oncology center, where a medical case conference referred her to follow-up treatment and provided an exact date upon which she should be admitted to gynecologic oncology ward.

Despite the good mental condition of the patient and a confirmation issued by the psychiatrists (who had been treating the patient for a few years) that her mental condition is stable and there are no contraindications for treating her in hospital conditions, the head doctor at the gynecological ward refused to admit her. The gynecologist-oncologist wrote that "due to the patient's mental condition – paranoid schizophrenia, and the type of the ward, the patient's presence poses a huge risk to other patients treated at the ward". He decided about referring the patient to an outpatient palliative care treatment (5x 4 Gy/g), with a control visit scheduled for the following month.

The oncologic radiologist refused to conduct irradiation, pointing to the need for conducting the whole series of irradiation in order to cure the patient totally. Eventually, radical 3D radiotherapy was conducted at the hospital ward – 44Gy/g in 22 fractions of 2Gy/g directed at the abdomen. During the hospitalization, no behaviors that might be posing a threat to other patients were reported. Other patients referred to that hospital have shown lots of empathy and were eager to help her in everyday chores. An endovaginal HDR-brachytherapy was conducted using a 3D method. It was divided into two parts, on an outpatient basis, with the overall dose of 15 Gy/CTV for the vaginal stump. After two years following the oncologic treatment, the patient still remains under doctor's supervision and undergoes regular check-ups that reveal no worrying oncologic symptoms.

Discussion

There is numerous evidence that patients diagnosed with mental disorders are more prone to various factors favoring the development of somatic diseases, like tumors. There are numerous epidemiological analyses in subject literature, concerning tumor mortality and morbidity and co-morbidity of schizophrenia. The findings tend to be divergent, though [6, 7]. Some researchers point to lower tumor morbidity among individuals suffering from schizophrenia [8–12]. Mortensen (1989, 1994) and Lichtermann et al. (2001) suggest that men suffering from schizophrenia are less likely to develop tumors than the overall population [13–15]. There are also suggestions that the risk for developing tumors is lower both among individuals suffering from schizophrenia and their first-degree relatives – parents and siblings [16–18]. Aside from these findings, there are numerous publications on the increased risk of tumors in schizophrenic patients [15, 19, 20] or increased morbidity of: colon cancer, breast and uterine cancer [11, 12, 21, 22]. Two teams of scientists: Catts (2008) and Lin (2013) pointed to an increased risk of cancer development in women – reversed correlation with the age of schizophrenia development [16, 18]. In addition, Lichtermann et al. (2001) and Ji et al. (2013) found an increased risk of breast cancer as well as cervical and endometrial cancer in patients treated for schizophrenia compared to general population [15, 17].

An analysis of the co-morbidity of tumors and schizophrenia is problematic. There are so many factors coming into play, like: social, pharmacological, psychosomatic, environmental or epidemiological and even genetic ones. Approx. 0.5–1% of the population [23] suffer from schizophrenia spectrum disorders. People suffering from schizophrenia tend to die approx.10–15 years earlier than individuals without any psychotic disorders [24–26]. There are numerous reasons why the risk of tumors in schizophrenic patients is assessed as so low. These patients tend to die younger for various reasons (traffic accidents, suicide attempts), before the tumor even starts to develop. The risk of proliferation of tumors obviously increases along with age. That

risk decreases with age among individuals aged over 60 suffering from schizophrenia [18]. This phenomenon is affected by the fact that schizophrenia increases the pace of aging (sight deficits, hearing problems, personality disorders, changes in brain morphology) [27, 28]. In the case of individuals suffering from psychotic disorders, a pharmacotherapy using antipsychotic drugs is important. Phenothiazine or butyrophenone derivatives indeed have some protective features (being antagonistic to calmodulin). Atypical neuroleptics, increasingly used in the pharmacotherapy of schizophrenia, do not show similar effects [29, 30].

Conclusions

While looking for possible reasons of cervical cancer development in individuals with psychotic disorders, all the possible carcinogenic factors have to be taken into account. In the case of the described patients, the risk factors were: nicotine addiction, genetic factors and, perhaps, improper personal hygiene (even though there were no signs of genital tract inflammation). This shows that both nulliparous women and virgins with mental disorders must not be denied screening examinations related to cervical cancer. In this very case, the fact that the medical staff has not been properly educated both in the case of oncologic disorders (poor prognoses, diagnostic problems, treatment ineffectiveness) [31], as well as mental disorders (stigmatization of individuals with mental disorders, conviction about the threat of active aggression on the part of a patient suffering from mental illness, marginalization of the problem of mental and somatic co-morbidity) [32, 33].

There is also the question whether a gynecologist is able to determine that a given person is aggressive toward others, after a short talk lasting for a few minutes? It is hard to understand why the patient's follow-up treatment was discontinued, even though it gave hope for improvement, and replacing it with palliative radiotherapy. Positive experiences related to laparoscopic treatment and radiotherapy debunk the myth that mentally ill individuals are unwilling to cooperate as patients.

Despite the changes, related to the implementation of the Polish national program of mental health, people with mental disorders with underlying physical illness are still stigmatized and discriminated, even by medical staff [34]. This concerns the following: blocking the access to medical centers, being neglected by medical staff, referring to other institutions, ignoring somatic concerns or including them as symptoms of mental illness [35, 36]. Mental disorders in comparison to physical disability or somatic illness are more socially stigmatized [37, 38], and schizophrenia is one of the most stigmatized illness worldwide [39]. Study results show stronger stigmatization of people suffering from schizophrenia compared to people treated due to somatic disorders (hematologic cancers, cardiovascular diseases) [40].

Taking into account the intensity of the described phenomenon and the differences in this respect between schizophrenia and other mental disorders, the results of

the research are divergent.. Lasalvia et al. (2016) indicated that people treated with schizophrenia are the most stigmatized among other mental disorders including severe depression [41]. According to Świtaj et al. (2010), schizophrenia is stigmatized similarly to depression and alcohol dependency [40]. However, drug dependency is stigmatized even more than schizophrenia does [40, 42, 43]. The phenomenon of stigmatization of people with mental disorders concerns 30–40% of mentally ill population in Canada [44] and 28% of the mentally ill in the United Kingdom [45]. Polish research projects showed that schizophrenia sufferers experienced discrimination in the following areas: rejection by others – 87%, interpersonal relationships – 68%, employment market – 55%, total discontinuation of social contacts due to mental disorders – 50% of patients [46].

We hope that the case described above, showing the presence of erroneous assumptions regarding the approach to people with mental disorders and their treatment will become a warning to all practitioners, regardless of their specialization. Refusal of diagnosis and treatment following up-to-date standards for mentally ill person based upon the fact of his/her psychiatric diagnosis, undoubtedly indicates discrimination of people with mental disorders. In the light of legal regulations, this should be regarded as a negligence and it should be further processed with Regional Screener for Professional Liability

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