

ANALYSIS OF ADVERSE EVENTS FOR ANTI –TUBERCULOSIS DRUGS IN
TUBERCULOSIS PATIENTS IN THE KHOREZM REGION

Askarova R.I.

Urgench Branch Tashkent Medical Academy, Uzbekistan

✓ *Resume*

In Uzbekistan tuberculosis is one of the most threatening social and medical problem. Tuberculosis has become an epidemic in many countries of the world. Almost one and a half million people die annually from this insidious infection. Tuberculosis can be prevented and cured even with the most scarce resources. The article analyzes the case histories of patients who received in the treatment in the Khorezm regional anti- tuberculosis dispensary.

Key words: tuberculosis, the treatment, side effects, anti-tuberculosis drugs;

АНАЛИЗ НЕЖЕЛАТЕЛЬНЫХ ЯВЛЕНИЙ НА ПРОТИВОТУБЕРКУЛЕЗНЫЕ
ПРЕПАРАТЫ У БОЛЬНЫХ ТУБЕРКУЛЕЗОМ В ХОРЕЗМСКОЙ ОБЛАСТИ

Аскарова Р.И.

Ургенчский филиал Ташкентской медицинской академии.

✓ *Резюме*

В Узбекистане туберкулез одна из наиболее угрожающих социальных и медицинских проблем. Туберкулез приобрел масштаб эпидемии в многих странах мира. Ежегодно почти полтора миллион человек умирают от этой коварной инфекции. В большинстве случаев туберкулез можно предупредить и предотвратить даже при самых скудных ресурсах. Несмотря на огромный опыт человечества и борьбе с туберкулезом. ежегодно в мире регистрируется 9 млн новых случаев заболевания туберкулезом и почти 2 млн умерших от него.

Ключевые слова: туберкулез, лечение, побочные эффекты, противотуберкулезные препараты.

ХОРАЗМ ВИЛОЯТИДА СИЛ КАСАЛЛИГИ БИЛАН ОҒРИГАН БЕМОРЛАРДА СИЛГА
ҚАРШИ ДОРИЛАРНИНГ НОЖЎЯ ҲОЛАТЛАРИ ТАҲЛИЛИ

Аскарова Р.И.

Тошкент тиббиёт академия Ургенч филиали

✓ *Резюме*

Ўзбекистонда сил касаллиги энг хавфли ижтимоий ва тиббий муаммолардан бири ҳисобланади. Ушбу инфекциядан ҳар йили жаҳонда деярли 1,5 миллион киши вафот этади. Бир миллион сил касаллиги ҳар йили аёлларда қайд этилиб, бу эса оналар орасида учрайдиган барча ўлим ҳолатларидан ҳам кўп демакдир. Силга қарши курашиш хизмати Ўзбекистонда бугунги кунда нуфузли давлатлар даражасига кутарилди, бу давлатимиз ушбу муаммога қаратилган тиббий профилактик сиёсати натижасидир.

Калит сўзлар: туберкулез, сил касаллигини даволаш, ножуя таъсир, силга қарши дори воситалари.

Relevance

Tuberculosis as an insidious disease has accompanied humanity for thousands of years. People have always looked for a cure for

tuberculosis. This disease claimed more lives than all wars combined. The main reason for the exacerbation of the epidemiological situation

with tuberculosis is the deterioration of the social living conditions of the population. In the Republic of Uzbekistan, a complex of large-scale anti-tuberculosis measures to combat tuberculosis is annually carried out.

Tuberculosis can be cured with medication. The discovery of the antibiotic streptomycin, which defeated tuberculosis rightfully belongs to Z.A. Waxman. It took many years of painstaking work of a large army of chemists, biochemists, pharmacists, microbiologists, clinicians, botanists to introduce anti-tuberculosis drugs. But at the present stage, humanity is worried about the increase in the number of patients with multidrug-resistant forms of tuberculosis (MDR). The Republic of Uzbekistan is one of the 20 priority countries of the WHO in terms of MDR-TB [1].

Treatment of drug-resistant tuberculosis is complicated from the point of view of constructing a DOTS treatment program: it is long-term, requiring patients to take chemotherapy for up to two years or more, while often enduring side effects of medications. In this case, adverse reactions caused by reserve drugs lead to a change in the treatment regimen and a decrease in the effectiveness of chemotherapy [1,2]. Therefore, studying the nature of adverse reactions caused by reserve drugs is a necessary prerequisite for effective treatment of patients with MDR-TB. The most important social risk factors in terms of avoiding treatment by tuberculosis patients are: alcohol abuse, loneliness of a homeless person, homeless, living alone and unmarried, lack of a permanent place of work, unemployed and unemployed. Also stay in the past in places of detention. Medical risk factors are the presence of bacterial excretion at registration of the patient and the fact of treatment in the phase of continuation of chemotherapy. Men and women interrupt treatment with the same frequency: 5.6 and 4.0%, respectively. Among men, treatment is interrupted more often by persons aged 31 to 50 years. Moreover, in patients with low efficiency of treatment, there is a combination of three factors or more [3,4]. Among patients with low adherence to treatment, late detection, widespread processes in the lung tissue, and abundant bacterial excretion are more often noted. multiple decay cavities, multiple drug resistance of the pathogen [3,10].

Thus, the most significant potential factors of low adherence to treatment in ineffectively treated patients with pulmonary tuberculosis are: demographic - socio-economic status. Social employment of the patient; personal -

understanding the disease and its consequences, the motivation of the patient and his family. Despite the efforts of phthisiatricians, there are a large number of patients who are negatively disposed towards therapeutic measures, most of whom undergo, but several repeated, often defective, courses of chemotherapy. It is in these patients that drug resistance of MBT is more often formed [5,6]. From a clinical standpoint, the main reasons for the spread of drug-resistant tuberculosis are late diagnosis, incorrect or incomplete treatment. Failure to adhere to basic principles contributes to the development of MBT resistance in combination chemotherapy. Of great importance was the "indiscipline" of patients - irregular intake of anti-tuberculosis drugs, premature discharge from the hospital, unauthorized care or discharge for violation of the regimen [9]. This situation, naturally, prevents the cure of these patients and promotes the development of drug resistance of mycobacterium to anti-tuberculosis drugs [7,8]. Due to the lack of the effect of chemotherapy, patients with drug-resistant pulmonary tuberculosis MBT for a long time remain bacteriological and can infect others with resistant pathogens, while the main reason for the increase in the number of patients with acquired (secondary) drug resistance is inadequate chemotherapy for newly diagnosed patients with tuberculosis ... The larger the number of such patients, the wider the reservoir of tuberculosis infection and the higher the risk of spreading it among healthy individuals and the emergence of new cases of pulmonary tuberculosis with primary drug resistance MBT [9,10]. So, in patients who took less than 50% of the planned doses during the main course of treatment. amplification occurred in 20.6% of cases. 60-70% of doses - at 12.5%. In more "regime" patients (more than 70% of doses), the expansion of the spectrum of drug resistance to drugs of the 1st and 2nd rows is reduced to 83%.

Patients with tuberculosis face many problems that affect their motivation for treatment. The most important factors that regulate the motivation of a person are value orientations: political, ideological, moral convictions of a person, deep and constant attachments. principles of behavior. The disease changes the perception of the present, the perspective for the future, contains the threat of loss of health and ability to work, changes in personal and social status, and the threat of death. As a result, there is a reassessment of personal values and motivation [2,1].

Purpose of the study: To study the

frequency, nature of adverse reactions caused by anti-tuberculosis drugs in patients who are in the regional anti-tuberculosis dispensary of the Khorezm region of Uzbekistan.

Material and methods

The study of the history of diseases of patients with pulmonary tuberculosis, an analysis of the medical records of an inpatient, TB 01, a register of adverse reactions of drugs, patients with primary MDR-TB who were treated at the Khorezm TB dispensary, the department of therapy for 12 months of 2020.

Result and discussion

In total, 93 medical histories of patients who were in the department were analyzed. Treatment of the regional tuberculosis dispensary in Urgench for 12 months of 2020 with primary MDR-TB. At the initial stage, in the first 2-3 weeks of treatment, at least one side effect was

observed in 76 (81.7%) cases, these PRs were temporary and disappeared on their own. 17 (18.3%) patients had no side effects. Visible adverse reactions to PVR were observed in 48 (51.6%) cases. In 34 (71%) patients, due to persistent adverse reactions, anti-TB drugs that caused AR were excluded from the treatment regimen.

Pas in all 48 (51.6%) cases, Eto / Pto in 6 (12.5%) cases. Latent side effects without clinical manifestations were reported in the form of eosinophilia 10 (20.8%) with eosinophil levels from 8% to 36%, as well as an increase in liver enzymes 5 (10.4%). The most common manifestations of PR were nausea, vomiting (80%), abdominal pain (14.6%), skin rash (16.6%), diarrhea (12.5%), neurological disorders (headaches, muscle cramps, insomnia) 12.5%. The average age of patients was 47 years (range 22-74), persons of working age accounted for 81.3%, most of them were men 28 (58.3%).

Table 1. Age of patients with tuberculosis observed

Up to 20 years	Up to 30 years	Up to 40 years	Up to 50 years	Up to 60 years	Over 60 years
4	13	12	5	7	7

Table 2. Analysis of patients by forms of tuberculosis, of which 33 are destructive forms

№	Forms	quantity
1		2
2	Cirrhotic pulmonary tuberculosis	10
3	Infiltrative pulmonary tuberculosis	26
4	Infiltrative pulmonary tuberculosis with disintegration	3
5	Fibrous-cavernous pulmonary tuberculosis	2
6	Chronic disseminated tuberculosis	2
7	Disseminated tuberculosis in the phase of infiltration and decay	1
8	Cavernous tuberculosis	3

Table 3. Tuberculosis with concomitant pathology, of 48 patients had 32 (65%)

№	Comorbidity	КОЛИЧЕСТВО
1	Addiction	1
2	Alcoholism	12
3	HIV infection	3
4	Diabetes	11
5	Hormone-dependent rheumatoid arthritis	1
6	Hormone dependent, bronchial asthma	2
7	Silicosis, occupational diseases	1
8	Stomach ulcer and 12 duodenal ulcer	1

Table 4. Manifestations of side effects after taking drugs

Adverse reactions from the gastrointestinal tract 44 cases, after taking drugs				
Nausea	vomiting	heartburn	Stomach ache	Loose stools
26	2	8	2	6
Adverse reactions from the liver -6 cases				
Increased thymol test	Increased ALT	pain	jaundice	Increased bilirubin
1	1	3	1	2
Side effects from the central nervous system-23 cases				
headaches		Sleep disturbance		depression
8		8		5
Skin reactions		Itchy skin in 8 patients		

Table 5. Side effects of anti-TB drugs in patients

Side effects	number	Percent
Nausea, vomiting	20	80%
Headache	10	40%
	4	16%
Hearing and vision impairment	7	28%
Diarrhea	7	2%
Joint pain	6	24%
Medicinal hepatitis	4	16%
dermatitis	2	8%
Peripheral neuropathy	2	8%

Table 6. Discovery of anti-tuberculosis drugs with publication in the literature

№	Preparation	Author, year, publication	
1	PASK	Berncheim	1941
2	Streptomycin	Waksman	1944
3	Pyrazinamide	Makcaness, Smith	1950
4	Isoniazid	Fox et al	1952
5	Cycloserine	Hernd, Kropp	1955
6	Kanamycin	Umezawa	1957
7	Ethionamide	Noufland-Guy-Loe	1960
8	Capreomycin	Herr et.al Loe	1961
9	Ethambutol	Thomas, Wilkinson	1966
10	Rifampicin	Maggi et al	1966
11	Fluoroquinolones	Gillepsei, Kennedy	1990

Most often, side effects of anti-TB drugs were on the gastrointestinal tract [2] (nausea, vomiting, diarrhea, drug hepatitis) - 30 (90.9%) cases, neurological disorders (headaches, peripheral neuropathies) - 12 (36.4 %) cases, arthralgia 7 cases (21.2%), allergic reactions in the form of dermatitis and hearing loss in 4 cases (12.1%).

Conclusions

Thus, interruption of the main course of chemotherapy and non-compliance with the

treatment regimen by patients lead to the formation of resistance of MBT to anti-tuberculosis drugs.

Side effects of anti-tuberculosis drugs limit the possibility of full chemotherapy. PD developed in all patients with concomitant gastrointestinal pathology, cachexia, and a widespread destructive tuberculosis process. The most typical manifestations of PR are nausea, vomiting, diarrhea - 39 (81.2%) cases, neurological disorders (headaches, depression,

insomnia) - 6(12.5%). Adverse reactions were mainly caused by Pas, Pto / Eto, Cs, Z. In 70% of cases, it became necessary to exclude one drug from the treatment regimen.

LIST OF REFERENCES:

1. Tillyashaikhov M.N., Turaev L.T. Review of a nationwide study of anti-TB drug resistance. Tashkent. 2012. pp. 20-22.
2. Koshechkin V.A., Ivanova Z.A. Tuberculosis: Textbook. Moscow, 2006. pp. 190-210.
3. Kozlovsky V.I., Karpitsky A.S. Hemoptysis and pulmonary hemorrhage in tuberculosis. // Military Medical Journal 1997, No. 6 pp29-33;
4. Xamrokulov R.Sh. The main tasks of the dispensary in the organization of TB control. Tashkent 2006; p.54-495.
5. Bogorodskaya E.M. Patients with tuberculosis: motivation for treatment // Tub. lungs - 2009. -T.86, N-9.-p. 3-10.
6. Vasilyeva I.A., Kuzmina N.V., Musatova N.V. The effectiveness of chemotherapy in patients with drug-resistant pulmonary tuberculosis - Edition. Timer, 2011. - 136 pages
7. Daminov E.A., Agafarova R.K., Mingazova G.Sh. Social support of patients with pulmonary tuberculosis // Tub .: materials of the LX Congress of phthisiatricians. -2011 - №4.-p. 32.
8. Druzhinin I.A., Kasparova L.S. Yasinetskaya N.V. Methods of increasing the effectiveness of treatment of patients with tuberculosis // Tub .: materials of the IX Congress of Phthisiatricians. - 2011-No. 4.p132-133.
9. Shurygin A.A., Magasova E.V., Stepanova E.A. Evaluation of the effectiveness of the daytime anti-tuberculosis hospital // Phthisiology and pulmonology. - 2013 .-- 1. - P. 57.
10. Eismong N.V. To substantiation of increasing the efficiency of hospital replacement technologies in phthisiology // Phthisiology and pulmonology. - 2013. -№2.-pp73-74.

Entered 09.04. 2021