



Research Article

MELANOMA- STATISTICS ON PATIENTS AND DEATHS IN THE REPUBLIC OF NORTHERN MACEDONIA IN THE PERIOD FROM 2008 TO 2012

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ABSTRACT

Melanoma is the most serious and one of the most malignant tumors of the skin. It accounts for about 5% of all primary skin malignancies but is also responsible for about 80% of all skin tumor deaths. According to the latest data from the Cancer Registry of Republic of North Macedonia, the number of patients with melanoma is constantly growing and is one of the tumors with the greatest expansion in recent times. Annual increase in the number of patients is 5-6%. In the Republic of North Macedonia in the period from 2008 to 2012 there was an increase in the mortality (55 death cases in 2008 and 64 in 2012). In 2012, 64 people died of melanoma at a rate of 3.1 per 100,000 inhabitants, of which 39 were men and 25 were women. The death rate for men is 3.8 per 100,000 men and the death rate for women is 2.4 per 100,000 women. In 2011 the total number of death cases is 56 and the mortality rate per 100,000 is 2.7, while in 2009 and 2012 there was a significant increase in the number of death cases. In 2009 there were 69 death cases, with a rate of 3.4 and in 2012 - 64 death cases and a rate of 3.1 per 100,000 inhabitants. The more the population is educated, the greater are the chances of noticing and recognizing suspicious changes in the body and their timely response will accelerate to dermatological examination.

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INTRODUCTION

Melanoma is a skin cancer that originates in skin cells called melanocytes. During sun exposure, melanocytes produce a black pigment - melanin, which plays a key role in protecting the skin from ultraviolet rays and on the other hand to achieve a copper tan on the body. Melanoma goes through three stages of growth: melanoma on the spot, radial phase and vertical phase (phase of invasion of the dermis).

The true cause of melanoma is still unknown. Exposure to UV radiation is considered to be a major risk factor for the development of all types of skin cancer and thus melanoma. Exposure to the sun with strong intensity in the first ten years of life is the strongest risk factor for the development of this type of skin tumor or melanoma. Other characteristic risk factors for the development and occurrence of melanoma are: excessive (uncontrolled) exposure to the sun or ultraviolet radiation (it can be a profession (construction workers, etc.) or hobby), skin pigmentation or people with fair skin, adults aged over 50, people who have more than 50 moles on the body,

melanoma in the family, personal information about melanoma, sunburn, intense sunbathing for a short period of time (on vacation), or "weekend" sunbathing, use of solarium, radiation therapy, Weakened immunity from chemotherapy, after organ transplantation, as well as in patients with HIV / AIDS who have very weak immunity and many other accompanying diseases, the impact of artificial UB light used for therapeutic and cosmetic purposes, hereditary genetic factor and similar.

When melanoma is suspected, a thorough examination of the skin of the whole body and visible mucous membranes with examination of the lymph nodes is required. Anamnestic examination is required for symptoms related to the gastrointestinal tract, brain, bones, and general symptoms such as: fatigue, fever, headache, motor outbursts, weight loss and the like. Laboratory tests are performed depending on the symptoms and signs of the disease present. Symptoms such as bleeding, itching, tension, or the onset of ulcers in the area of the lesion may indicate the development of melanoma, although these symptoms are more common in advanced disease.

The most important thing for the treatment of melanoma and the outcome of the treatment of melanoma is to detect the

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melanoma as early as possible and then follow the surgical excision of the primary tumor with appropriate width in healthy skin. Also depending on the stage, melanoma enlargement, chemotherapy, immunotherapy and radiotherapy can be used. If the lesion does not spread beyond the primary site, melanoma is thought to be potentially curable. [1-6]

MATERIAL AND METHODS

For the purposes of the research were used archival data for statistics at the national level from the Institute of Public Health of the Republic of Northern Macedonia in the period from 2008 to 2012. The data are for the number of patients with malignant melanoma and death cases according to the age and gender of the patients.

RESULT AND DISCUSSION

The number of melanoma patients is constantly increasing and is one of the most rapidly expanding tumors in recent times. The annual increase in the number of patients is 4-5%, which means that the number of patients doubles every 10-15 years. The incidence of melanoma is steadily rising and is growing at an annual rate of 2.5% faster than any other preventable cancer. The Republic of Northern Macedonia in the period from 2008 to 2012 has a tendency of increased mortality, in 2008 there were 55 death cases and in 2012 - 64. In 2012, 64 people died of melanoma at a rate of 3.1 per 100,000 inhabitants, of which 39 are men and 25 are women. The death rate for men is 3.8 per 100,000 men and the death rate for women is 2.4 per 100,000 women. Of the 64 death cases, 63 are over the age of 20 and one is under the age of 20. The results of the research show that in men the most common localization for melanoma is the trunk and in women, the most common place of melanoma is the hands. Melanoma of the head occurs between the ages of 20 and 60, with a peak incidence in the 5th decade.

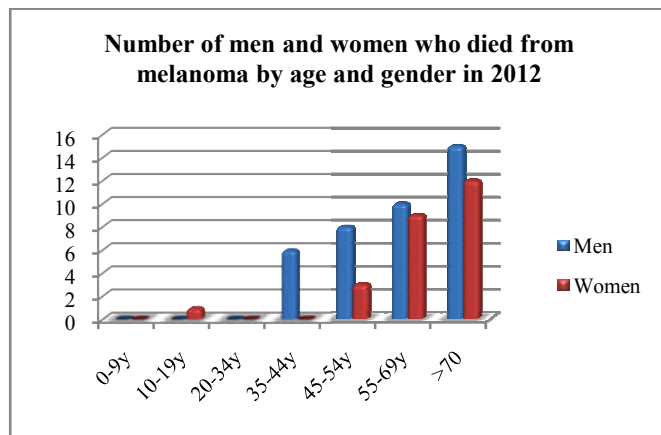


Diagram 2 Mortality by gender and age in RNM in 2012

In 2012 it can be concluded that as the age of the patients increases, ie as the age group increases, the number of deaths increases with the predominance of a larger number of deaths in men than in women, with the exception of the age group from 10 to 19 years where there is no registered case of mortality in the male population and in the female population there is a registered case of mortality.

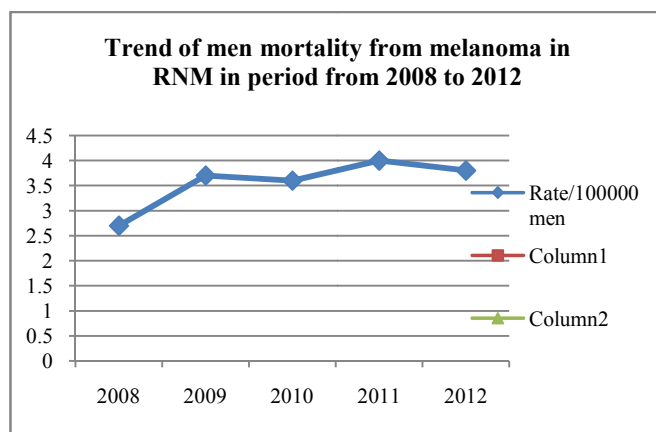


Diagram 3 Trend of mortality in men in RNM

Diagram 3 shows the trend of movement of melanoma mortality in men in RNM in the period from 2008 to 2012, which shows that there is an increase in mortality in men from year to year, with the highest increase in mortality in men from melanoma in 2011 which amounted to 4.

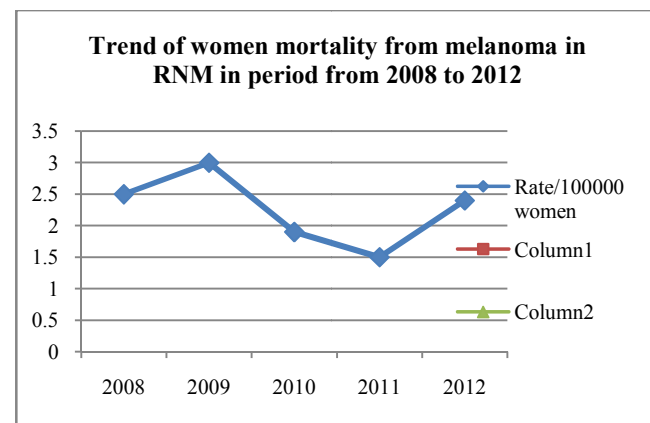


Diagram 4 Trend of women's mortality in RNM

Diagram 4 shows the trend of movement of melanoma mortality in women in RNM in the period from 2008 to 2012, which shows that there are variations in the growth of mortality, some years it increases, some decreases, so it has the

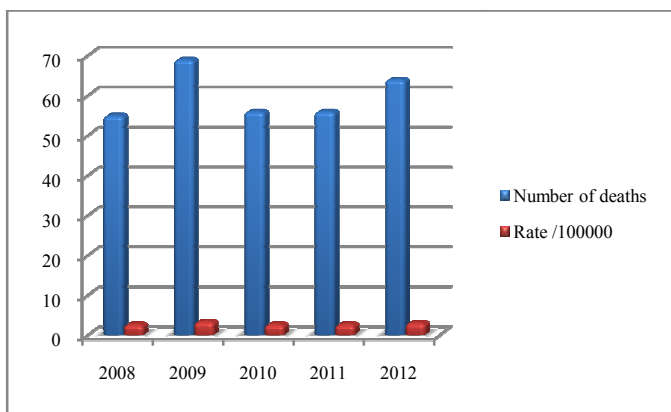


Diagram 1 Rate of death cases in Republic of North Macedonia from 2008 to 2012

Diagram 1 presents the data on the total number of deaths and the rate of deaths from melanoma in RNM so that in 2008 with a total number of deaths 55 and in 2010 and 2011 with a total number of 56 deaths the death rate per 100,000 is the same is 2.7 while in 2009 and 2012 there is a significant increase in the number of death cases and the death rate, in 2009 69 death cases with a rate of 3.4, 2012 with 64 deaths and a rate of 3.1 per 100,000.

highest growth in 2009. which is 3 and the lowest growth is in 2011 which is 1.5.

Table 1 The number and rate of newly registered in RNM

Number and rate of newly registered patients of melanoma in RNM		
Melanoma C34	Number	Rate/100 000
Men	46	4.5
Women	35	3.4
Total	81	4.0

These data show that there are a total of 81 newly registered cases of melanoma in the Republic of Northern Macedonia (RNM), of which 46 cases are from the male population and 35 cases are from the female population. The rate per 100,000 inhabitants for men is 4.5 while the rate per 100,000 inhabitants for women is 3.4. And given the data we can conclude that men are the ones who are at higher risk of getting sick and they are the ones who are more often suffering from malignant melanoma of the skin.

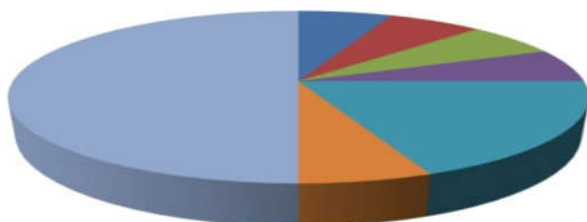
Average number of melanoma patients treated in hospital inpatient conditions per year in Macedonia is 200.

Average number of realized hospital days of melanoma treated per year in Macedonia is 1680 hospital days.

Table 2 Localization of maligna melanoma by gender

Localization	W	%	M	%	Total	%
Head	1	12,5	0	0	1	6,25
Neck	1	12,5	0	0	1	6,25
Back	1	12,5	7	87,5	8	50,00
Chest	1	12,5	1	12,5	2	12,5
Arm	3	37,5	0	0	3	18,75
Leg	1	12,5	0	0	1	6,25
Total	8	100	8	100	16	100

The results obtained in women in this study showed diversity in localization. The diversity in localization can also be seen on (Chart 1). The most common localization in women (3 or 37.5%) were the hands. There are also patients with a lower percentage of malignant melanoma localized on the head, neck, back, chest and legs. However, the results obtained in men showed that most patients (7 or 87.5%) had malignant melanoma localized on the back slightly lower percentage of the arm and chest and a very small percentage on other parts of the body such as head, neck and leg.



Head Neck Back Chest Arm Leg Total

Chart 1 Localization of malignant melanoma in women



Back Chest Total

Chart 2 Localization of malignant melanoma in men

CONCLUSION

The exact cause of melanoma is not yet known, but exposure to sunlight and other sources of ultraviolet radiation is thought to be the biggest risk factor. The mortality rate from malignant melanoma in the world and in our country is increasing from year to year, and the costs of treatment are increasing too. With proper prevention, timely detection and diagnosis of precancerous lesions, this disease can be controlled and with appropriate therapy, mortality can be significantly reduced.

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