

Table 2 – The Data for *Ascaris Lumbricoides*, *Tichuris.tichuria* and Hookworm

Years	<i>Ascaris Lumbricoides</i>	<i>Tichuris Tichuria</i>	Hookworm
2013	70.4%	86.32%	73.65%
2014	60.66%	55.47%	40.45%
2015	72.67%	62.20%	58.34%
2016	83.75%	70.01%	66.23%
2017	76.23%	65.72%	58.62%
2018	74.71%	68.54%	58.30%
2019	62.54%	59.34%	47.87%
2020	73.64%	65.40%	57.41%
2021	45.44%	32.03%	31.70%
2022	32.23%	12.26%	10%

### **Conclusions**

In case of dynamics, we can see there is a decrease in the incidence of *Ascaris Lumbricoides* in 2022 with 32.23 % in comparison with 70.4% in the year 2013. There is increase in the incidence in the year 2016 with 83.75%. There is a decrease in the incidence in *Trichuris trichuria* in the year 2022 with 12.26% and increase in the year 2013 with 86.32%. There is a decrease in the incidence of Hookworm in the year 2022 with 10% and increase in the year 2013 with 73.65%. This article is to know the dynamics and prevalence of soil-transmitted helminth from 2013–2022 and also from the different States of India. From the year 2013 to 2020 there is increase in the incidence of Helminthic Infections in India due to lack of awareness, seasonal changes and lack of preventive measures. The decrease of the incidence in the year 2021 and 2022 is due to the proper management taken against helminthic infections.

### **LITERATURE**

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**УДК 616-002.365-036.22(476.2)**

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## **EPIDEMIOLOGY OF ERYSIPELAS INFECTION IN GOMEL REGION**

### **Introduction**

Erysipelas is an acute bacterial infection of the dermis and hypodermis that is associated with clinical inflammation. It is a specific clinical type of cellulitis and, as such, it should be studied as a specific entity. Erysipelas is generally caused by group A streptococci; it is



highly probable that streptococcal toxins also play a role, which could, in part, help explain the clinical inflammation [3]. Erysipelas of the leg is the main clinical type encountered. The face, arm, and upper thigh are the other most common sites for the occurrence of erysipelas. After a sudden onset, areas of erythema and edema characteristically enlarge with well-defined margins. Athlete's foot is the most common portal of entry for the disease [3]. Erysipelas is generally associated with high fever, and adenopathy and lymphangitis are sometimes present. At the time of diagnosis, it is important to look for clinical markers of severity (local signs and symptoms, general signs and symptoms, co-morbidity, social context) which would necessitate hospitalization. There are many differential diagnoses, particularly in the case of atypical dermo-hypodermatitis [2]. Some bacterial infections may have specific clinical aspects or may lead to a diagnosis of cellulitis. Necrotizing cellulitis or fasciitis are life-threatening diseases and a rapid diagnosis is important. Other noninfectious types of cellulitis have been reported in many diseases, both localized or generalized. The biology of typical erysipelas is of little value in diagnosis and a laboratory workup is usually not required. There are few local complications associated with erysipelas; abscess can occur in some patients and septicemia is rare. Recurrence is the more distressing complication. Treatment of patients with erysipelas has been evaluated in a small number of studies. In most of them, erysipelas has been included in therapeutic studies of "severe cutaneous infections". This is not justified as in fact erysipelas is usually sensitive to penicillin G. Amoxicillin and macrolides are also effective. However, comparative, cost-analysis studies need to be performed to determine the best therapeutic option [1]. Bed rest with the leg elevated is also important. Anticoagulants are indicated in patients at risk of venous thromboembolism. The portal of entry will also require treatment. Long-term antibacterial therapy is required for patients with recurrence [1]. In this study we will study about the epidemiology and clinical parameters including age, sex, hospital stay, form of erysipelas, treatment of surgical care or conservative, localization of erysipelas, complicated by comorbidity, and relapses of the disease.

### ***Goal***

This study aims to study about the epidemiology and clinical parameters including age, sex, hospital stay, form of erysipelas, treatment of surgical care or conservative, localization of erysipelas, complicated by comorbidity, and relapses of the erysipelas disease.

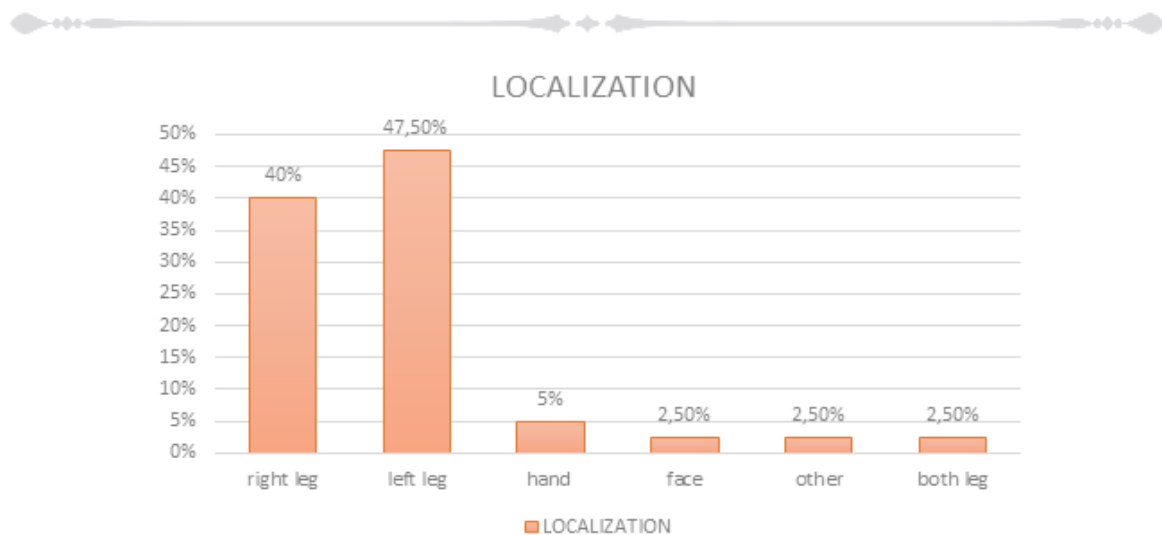
### ***Materials and methods of research***

Retrospective analysis of the case histories was made in the surgical department of Gomel regional clinical hospital, Belarus. Permission for research was granted by the Gomel state medical university. Medical case histories of 40 patients 20 were females and 20 were males aged between 20–90 years were used for this study. And they were divided into 3 age groups such as 20–30 years, 30–60 years and 60–90 years.

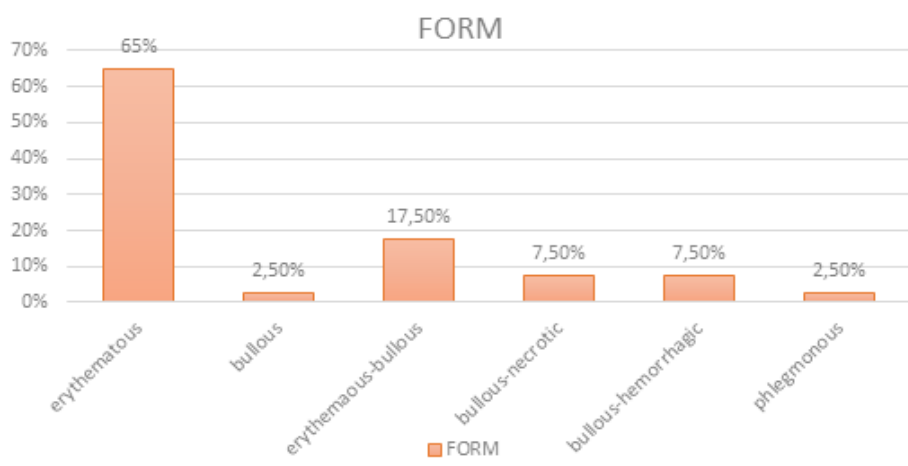
The gathered data was from the month of January to December of 2021 to 2022. Statistical processing of the results was carried out using the Microsoft Office Excel 2021 program.

### ***Results of research and their discussion***

40 patients case history were studied, in that 20 patients were male and 20 patients were female. The median age group was 60–90 (65%, n=26), followed by 30–60 (32.5%, n=13), 20–30 (2.5%, n=1). All patients were hospitalized for the treatment, the average stay of patients varies from 5-10 days (42.5%), 10–15 days (32.5%), 15–20 days (2.5%) and 20–30 days (22.5%). Of which 17 (42.5%) patients have comorbidities most commonly diabetes mellitus and shows diabetic foot syndrome, and then arteriosclerotic cardiosclerosis, obesity, arterial hypertension, COVID-19 infection and neuroinfection. 35 episodes were first time infection and 5 episodes were represented relapses. The most common localization of the erysipelas is leg 90% (n=36), and very rarely hand 5% (n=2), face 2.5% (n=1), others(abdomen) 2.5% (n=1) shown in figure 1.



**Figure 1 – Localization of erysipelas in the body**




**Figure 2 – Clinical forms of erysipelas**

Of which left leg is most commonly involved in the infection than right leg, and tibia is the most common site of the infection in 55.6% patients and followed by lower leg and foot 33.3%, and in 11.1% patients both upper and lower part of the leg is involved in the infection. The most common form of the disease is erythematous 65% (n=26), and followed by erythematous-bullous 17.5% (n=7), bullous-necrotic 7.5% (n=3), bullous-hemorrhagic 7.5% (n=3), bullous 2.5% (n=1), phlegmonous 2.5% (n=1) as shown in the figure 2. About treatment, only 6 patients underwent surgical care and the remaining 34 patients were treated conservatively. Of those 6 patients, were given supportive surgical care such as opening and drainage of abscess and/or phlegmon.

### **Conclusions**

In this study we can conclude that the patients aged from 60-90 (65%) were mostly affected by the erysipelas. Mostly patients stay in hospital with a short time of 5-10 days but it varies with some patients those who are with increased risk of comorbid diseases. Our study has some limitations. Firstly, because our study was hospital based the recruitment of cases could be biased toward more severe disease or more disabled patients. But because no community-based study of erysipelas of the leg is available, it was impossible for us to assess whether our cases had more specific risk factors than those patients not referred to hospital. We can see that mostly erysipelas occurs as a primary infection. And occurs as an erythematous form predominantly, but we can see that mixed form of erythematous-bullous also as common. And mainly leg is the most common site of infection specifically tibia. And only 5 cases we reported as recurrence, we did



not specifically study risk factors for recurrences. The prevalence of risk factors, however, was shown to be similar in cases of recurrence and first episodes, and it can be reasonably assumed that a patient with strong risk factors for a first episode also has a strong risk for recurrence if these factors remained unchanged. The prevention of recurrence is currently based on long term prophylactic antibiotic therapy. Erysipelas is a relatively common and usually easily treatable condition if handled early. Possible complications include septicemia, meningitis, endocarditis, necrotizing fasciitis, and streptococcal toxic shock syndrome [2]. The mainstay for treatment of erysipelas caused by penicillin. In some patient other appropriate antibiotic coverage may be necessary. The prognosis is excellent for patients receiving suitable and timely treatment. Most patients experience a complete recovery after antibiotics and few experience recurrences.

#### References

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