PROF. DR. HULUSI BEHCET (A FAMOUS TURKISH PHYSICIAN) (1889-1948) AND HIS BOOK ON CUTANEOUS LEISHMANIASIS (ORIENTAL SORE)

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Abstract: Prof. Dr. Hulusi Behçet (1889-1948) is a famous Turkish physician. He translated many foreign articles into Turkish to help the education of new generations and published original case reports in the international reviews in order to make contact with foreign countries. Moreover, he published many books. Fifty-three of those appeared in prestigious European Scientific Journals. We know that is infected with vector phlebotomus can be seen in many regions of the world and has been known in Mediterranean Region and Middle East for centuries. Many Turkish researchers like Celal Muhtar, Hulusi Behçet and some foreign scientists investigated some subjects about this disease. Leishmaniosis (Oriental Sore) was another disease which Dr. Behçet worked on, beginning in 1923. He first described "the nail sign" appearing by the removal of the crust of an Oriental Sore. Hulusi Behçet wrote an important book with the name of the Therapy of Oriental Sore with Diathermy (Şark Çıbanının Diyatermi ile Tedavisi in Turkish). This book is 23 pages. In this book, the therapeutical ways of Oriental Sore and some cases are present. Moreover, Dr. Behçet mentions diathermy in his book. In this paper, Prof. Dr. Hulusi Behçet’s biography and his book with the name of the Therapy of Oriental Sore are stressed and some comments are pointed out.

Key words: medical history, oriental sore, epidemics

Prof. Dr. Hulusi Behçet is a famous Turkish physician [13].

Hulusi Behçet’s book with the name of the Therapy of Oriental Sore with Diathermy (Haleb veya Şark Çıbanlarının Diyatermi ile Tedavisi in Turkish) is a monography of 23 pages and is with the date of 1925 [5].

In this book, some medical cases are given and commented. According to Behçet the “Oriental Sore” is seen in Baghdad, Diyarbakar, Aleppo, Sivas, Yemen etc. Its therapy continues one year and a good result cannot be obtained every time” [8].

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We know reports of a disease simulating the type of lesion seen in cutaneous leishmaniasis were first made in 1756 by Hasselquist and Russel. Also in the middle of the nineteenth century, the same type of lesion was described by French medical officers in Africa. Laveran demonstrated in 1880 that this condition could be transmitted and that a fly was an important factor. In 1885 Cunningham described a histological picture and stated that there were bodies within the cells which were circular to elliptic in shape. Ryan, in 1886, also described some cells which were filled with bodies which he regarded as cocci with capsules. He attempted cultures in human blood but obtained no results. It was not until 1903 that Leishman and Donovan made independent reports describing the protozoan. During the same year Wright in Boston described the organisms found in the first case of cutaneous leishmaniasis reported in this country.

In this book, Behçet specified that: “The 'tin-tack' sign (TTS) was the appearance of horny processes that project from the under-surface of a crust. Although it was a well-known feature of disoid lupus erythematosus it might be also seen in other crusted lesions particularly in cutaneous leishmaniasis.” So, Hulusi Behçet mentioned the tin-tack sign for the first time in the world. Leishmaniasis (Oriental Sore) was another disease which Dr. Behçet worked on, beginning in 1923. He wrote about it in many articles and succeeded in its treatment with diathermic. He first described "the nail sign" appearing by the removal of the crust of an Oriental Sore in 1916. To Behçet, this symptom was the most important sign of oriental sore. Oriental Sore was diagnosed both microbiologic analysis of Leishmianias and nail sign. A Turkish physician, Abimelek mentioned in his book named Discuss on Oriental Sore (Cilt Leishmaniose’ları Hakkında Münağa Münasebetiyle in Turkish) with the date of 1934 that Behçet described nail sign in Oriental Sore for the first time in the world. Moreover, the paper of Alfred Marcionini and Kemal Turgut dated 1944 with the name of Essays on the Pathology, Clinic and Treatment of Oriental Sore in the Middle Anatolia (Orta Anadolu’da Gürülə Şark Çibanlarının İnşarı, Patojenisi, Klinik ve Tedavisi Hakkında Tecrübeler in Turkish) gave some knowledge about the Oriental Sore in the Middle Anatolia. To this paper, Oriental Sore was named as Diyarbakır Çibani (Sore), Mardin Çibani, Urfa Çibani etc. to the cities of Turkey. These physicians and the entire world also accepted that Hulusı Behçet described the nail-sign in the oriental sore for the first time in the world.

We know that there are a number of types of protozoa which can cause leishmaniasis. Each type exists in specific locations, and there are different patterns to the kind of disease each causes. The overall species name is Leishmania (commonly abbreviated L.). The specific types include: L. Donovani, L. Infantum, L. Chagasi, L. Mexicana, L. Amazonensis, L. Tropica, L. Major, L. Athiopica, L. Brasiliensis, L. Guyaensis, L. Panamensis, L. Peruviana. Some of the names are
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reflective of the locale in which the specific protozoa is most commonly found, or in which it was first discovered.

This famous physician mentioned that some drugs such as Neosalvarsan or carbonic acide couldn’t treat it. But, to Behçet, diathermy therapy was the best way. Behçet mentioned diathermy in every page of his book. To Behçet: “Diathermy method is applied in developed cities and good results are obtained.” Behçet treated some leishmaniasis cases with this way from 1920 to 1922. In this book, 4 cases are given. One of them was the son of a merchant from Adana. This patient was 19 years old and travelled to Syria for the trade occasionally. Ulcers were located on his right neck and these were combined in time and became in the size of silver coin (mecidiye). Other doctors couldn’t treat this patient.

In this case, Hulusi Behçet determined Leishmania by preparing culture and diagnosed this disease as oriental sore.

Moreover, in his book, Hulusi Behçet wrote that Dr. Resat Rıza and Mustafa Bakar prepared Leishmania Tropica cultures and this research was published in Gulhane Seririyyatı Journal in German. In this first case, Hulusi Behçet examined microorganisms by ultramicroscope and saw flagellums. He informed about their dimensions. So, he applied diathermy to his patient. Hulusi Behçet accepted diathermy as the best therapy [3, 7, 9].

The second case of Hulusi Behçet was a servant girl. She was 23 years old. Oriental sore was seen on finger of right hand and left cheek. It was of a dull red colour and was inflammatory, quite tender and painful. Hulusi Behçet also diagnosed this case as oriental sore.

In his third case, Hulusi Behçet treated a porter from Diyarbakır. He was 42 years old. Sore was on his right eyebrow and left cheek. The fourth case belonged to a girl. She came from Tahran to Istanbul. She was relative of Iran Emperor. A deep sore was on her right cheek. Behçet also treated this case with diathermy.

Famous Turkish physician Behçet gave some knowledge about the discovery of microorganisms and their names. Behçet mentioned that American scholar Wright named this disease’s microorganism as Helcosome tropicum at that time and R. Ross gave the name of Leishmania tropica ou furonculese to it. But, afterwards, Leishmania Donovani was known as its microbe.

Moreover, Behçet gave some knowledge about Leismania kinds in his small book: “Leishmanias are in two forms: Forms with flagellums and without flagellums. Two kinds of Leismanias are present. One of them is Leishmania Donovani and another is Leishmania tropica L. We also know Leishmania Americana. Leishmania Donovani also causes Kala-azar.

Hulusi Behçet also gave other useful knowledge in his important book. Oriental Sore was seen in India, South Asia, Mediterrenean Sea Region, North Africa, Crete and Greek Islands, Adana etc. Oriental Sore was named Halep (Aleppo), Nile, Tahran, Isfahan, Palestine, Ankara and Diyarbakır sores. Hulusi Behçet mentioned epidemiology of this disease. Especially, Oriental Sore was infected from animals to dogs, monkeys, mouses.

Hulusi Behçet also mentioned the characteristics of oriental sore. To Behçet: “On an average a fully developed Oriental sore is an inch or so in diameter. While there is often but one, there may be several or more distinct and sometimes quite widely separated formations. An Oriental Sore, when developed, is of a dull red colour, is usually of sluggish nature throughout its course, unless constantly knocked, irritated, or having added an active pyogenic factor, when it may become much more inflammatory, and quite tender and painful [4, 6, 12]. The favourite regions are the face, hands and
forearms, and legs, but no part is exempt.

Moreover, Behcet gave some knowledge about some ways used in oriental sore therapy. According to Behcet, arseno benzol and salvarsan couldn’t treat oriental sore. Neosalvarsan was good for syphilis. Famous physicians, Resad Rıza and Abdulkadir Bey accepted this condition. The best method was the diathermy [10]. This was an apparatus with electric. Namely, electric was applied to the sore. But this apparatus was present in the modern cities of Turkey at that time. To Behcet, in the other cities of Turkey, frozen carbonic acid was used for the therapy. But, he preferred diathermy therapy more than frozen carbonic acide.

Hulusi Behcet applied diathermy by anaesthetizing his patients and the patient healed in ten or twenty days. So, he advised application of diathermy to every physician in his book.

Hulusi Behcet gave a paper on nail sign of oriental sore in 1932 . M. Mayer and Ernst Nauck also accepted Behcet’s thoughts on this topic.

Hulusi Behcet again mentioned these topics in his paper with the date of 1934 and named Two Important Points on Wright Sores (Wright Çıbanları Seririyatında Đkmal Edilmiş İkî Mühim Nokta in Turkish).

Approximately 350 million people in 8 countries are estimated to be under the threat of leishmaniasis. Most of the drugs used for the treatment of leishmaniasis are toxic and have many side effects. At present there is no vaccine against leishmaniasis. Vaccine development for parasitic infections is more difficult than for viruses and bacteria because of the antigenic complexity and parasitehost interactions [1, 2, 11].

References