



April 18, 2018
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IN AND AROUND TABUK



Camel Racing Club

A place to see thousands of camels racing is a little more than an hour's drive from Tabuk University along the highway to Medina – Dr. Tanveer

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MedEdu Tabuk

Weekly Newsletter

Department of Medical Education, Faculty of Medicine, University of Tabuk

Objective of MedEdu Tabuk

Message From the Editor- Dr. Tanveer Raza

The objective of MedEdu Tabuk is to be a platform for healthcare professionals in Tabuk region to express their voice. It aims to share their thoughts and views.



It will help us serve the community better. Health care professionals willing to contribute their articles, photos or activities are requested to send them to: mededutabuk@u.tedu.sa



This Week Last Week

WEEKLY ACADEMIC ACTIVITY



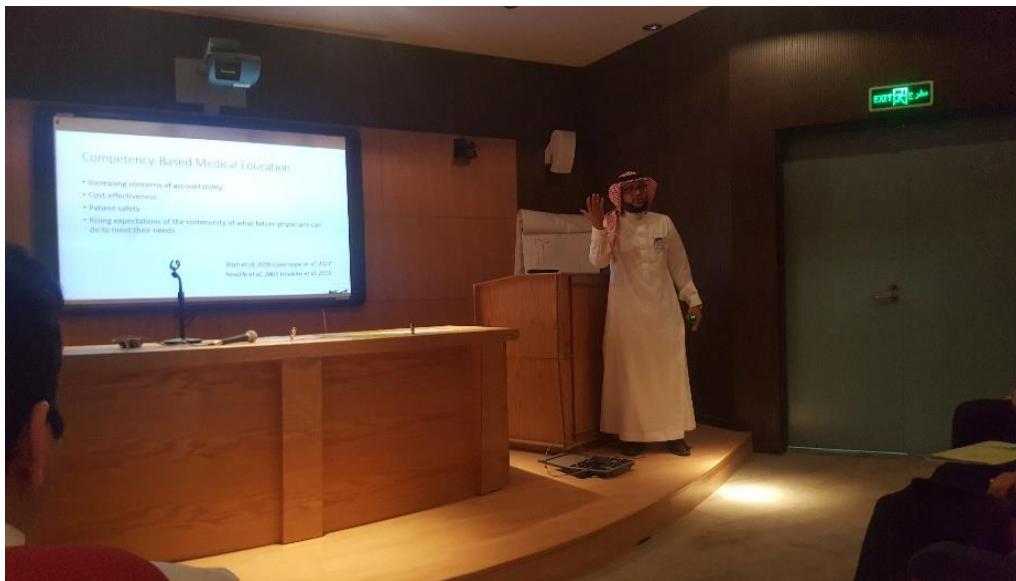
Dr. Tawfeeq Alanazi

Dean of The Institute of Research and Consultancy



Dr. Marai M. Alamri

Dean of Medicine



Where do we stand from SaudiMed Competency Framework?

Dr. Badr Al-Sayed

Faculty of Medicine



Constructive Feedback

Professor Shereen Fawzy Hafez

Prof. Hafez is a Professor of Medical Microbiology & Immunology and an expert in Medical Education at The Faculty of Medicine, University of Tabuk. She can be contacted by email: sh_ibrahim@ut.edu.sa



Constructive feedback is an essential part in the teaching and training process, it is shown to improve competence of medical trainees. Feedback allows trainees to understand their strengths and weaknesses and highlights areas need to work on to improve their performance. Trainees need the feedback as closely as possible whether for improvement or success. Trainees should also seek and be active participants in the feedback process. They need to be able to assess themselves and reflect on their performance as they are responsible for it. Feedback should be a fixed task on the trainer-trainee agenda, even though they are busy, few minutes will make a very big difference. It should be relevant, timely and specific. When done correctly it is highly motivational and improves learning outcomes and the quality of the trainee in short time. Different formats are used to standardize the way for giving feedback. Examples of feedback models; "Pendleton's model", "Chicago model" and the simplest form "the feedback sandwich". Whether or not using a certain model the following guidelines should be recognized by either the trainers or trainees.

Guidelines for trainers when giving constructive feedback [1]

- Give feedback when the trainee is ready (this may be physically, practically or emotionally) so that they are likely to be receptive
- Give feedback as soon after the event as possible
- Ask the trainee how they think things went first; this will open the conversation and let you see how well the trainee is judging their own performance
- Focus on the positive first

- Give feedback privately wherever possible, especially more negative feedback
- Use skills such as rapport, developing respect and trust with the trainee
- Stay in the 'here and now' and on the observed task, don't bring up old concerns or previous mistakes, unless this is to highlight a pattern of behaviors
- Focus on specific behaviors that can be changed and the task itself, not personality traits
- When giving negative feedback, suggest alternative behaviors
- Be sensitive to the impact of your message, consider the content of the message, the process of giving feedback and the congruence between your verbal and non-verbal messages
- Encourage self-reflection. This will involve posing open questions
- Be clear about what you are giving feedback on and link this to the learner's overall professional development and/or intended outcomes of the program
- Do not overload – identify two or three key messages that you summarize at the end

Guidelines for trainees when receiving constructive feedback [1]

- Listen to it (rather than prepare your response/defense)
- Pause and think before responding
- Ask for it to be repeated if you did not hear it clearly
- Ask for clarification and examples if statements are unclear or unsupported
- Assume it is constructive until proven otherwise; then consider and use those elements that are constructive
- Accept it positively (for consideration) rather than dismissively (for selfprotection)
- Ask for suggestions of ways you might modify or change your behavior
- Respect and thank the person giving feedback.

Reference:

1. <https://faculty.londondeanery.ac.uk/e-learning/teachers-toolkit-guidelines-for-giving-and-receiving-feedback>

STUDENT SECTION

HOW TO PROTECT YOURSELF FROM SINUSITIS?

Eid Farij Alatawi

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To protect yourself from any disease, you need to know how the disease can affect you, and the good habits you can do to avoid that disease. You must know the bad habits so that you may avoid it. Fortunately, humans in this century know a lot of information about the causes and treatment of many diseases, more than any time in the history of human beings. Now we know a lot about sinusitis and its causes and its prevention also. Sinusitis is inflammation of the lining membrane in any of the sinuses of the skull around the nose. It classified as acute (less than 4 weeks) or sub acute (between 4 -12 weeks) or chronic (more than 12 weeks). Sinusitis can be caused by viruses (majority of cases), bacteria, fungi and even air pollutants. To protect from sinusitis we must avoid breathing dry air by using a humidifier at home and work to increase the air moisture. We must protect ourselves from upper respiratory tract infection by regularly washing our hands and avoiding dust. If you are allergic to any animal, you must avoid it. You must treat a deviated nasal septum. Keep vaccinations up to date. Stop smoking, avoid second-hand smoke and practice good hand hygiene.

STUDENT SECTION

Faisal Khalid Alabduli, 5th Year

BLOOD DONATION

Blood donation is very important because it may save lives of other people who are in need of blood. In addition, there are many benefits for the donor to maintain good health as to prevent hemochromatosis, stimulates blood cell production and maintain healthy heart and liver by preventing iron overload. This can reduce the risk of various health diseases.

In addition to these benefits, the main goal for blood donation is to help

Blood donation is our human duty. Our body does not get affected if we donate blood, and it is very simple and can be done in a short time. The body can repair the loss within a few days. Therefore, we must come forward to donate blood.

I had donated blood before; it was simple and not complicated. It did not take a long time. It took about 15 minute versus the great feeling that you help many people.



Exam Invigilation Schedule 22/04/2018 - 26/04/2018



Dr. Zubair Mohammad & Dr. Ahmed Masaik

Date	Module	Invigilators	Reserve Invigilator	Time	Venue
29/04/2018	Clinical Skill Module (Written)	Dr. Khalid Alhazmi Mr. Adil Alatawi	Dr. Hisham Khairy	10:00-12:00	PBL 2
		Dr. Waleed Shaban Mr. Mehdi Hasaan Albalawi	Prof. Ihab Mohammed	10:00-12:00	PBL 3

UPCOMING ACTIVITY

Activity 1: Weekly Academic Activity

Time and Date: 1 pm – 3 pm, Wednesday 25th of April 2018

Venue: Academic Activity Room (Opposite Dean's Office)

Lecture 1: Talk by Dean of Student Affairs Deanship, Faculty of Medicine, University of Tabuk- Dean Dr. Aied AlHarbi

Lecture 2: Drug Abuse and Addiction- Dr. Seif Ali, Assistant professor of Medicine, Faculty of Medicine University of Tabuk

Activity 2: Fifth Medical Education Committee Meeting

Time and Date: 9 am – 10 am, Wednesday 25th of April 2018

Academic Affairs arrangement for Next Week



Prof Magdy M. ElShamy

For Female Section:

- ❖ **Islamic study (2) Module:** 2nd year, **Final Exam**, on Monday, 23/4/2018
- ❖ **Computer skills & Applications (CSC 001):** Preparatory year, **Final Exam** on Wednesday 25/4/2018
- ❖ **Mathematics 2 (MATH 101):** Preparatory year, **Final Exam** on Thursday 26/4/2018

For Male Section:

- ❖ **Islamic study (2) Module:** 2nd year, **Final Exam**, on Monday, 23/4/2018
- ❖ **Computer skills & Applications (CSC 001):** Preparatory year, **Final Exam** on Wednesday 25/4/2018
- ❖ **Mathematics 2 (MATH 101):** Preparatory year, **Final Exam** on Thursday 26/4/2018

MOBILE DEVICES FOR LEARNING IN CLINICAL SETTINGS

Reference article: Scott, Karen M., et al. "Using mobile devices for learning in clinical settings: A mixed-methods study of medical student, physician and patient perspectives." *British Journal of Educational Technology* 48.1 (2017): 176-190.



**Summarized by,
Dr. Yazan Khasawneh**

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A MIXED-METHODS STUDY OF MEDICAL STUDENT, PHYSICIAN AND PATIENT PERSPECTIVES

This study was conducted with medical students, physicians, patients and carers in a paediatric and an adult hospital to determine use of mobile devices for learning, and beliefs and attitudes about others' use. Awareness of ethical, patient privacy and data security concerns was explored and a separate survey for patients and carers.

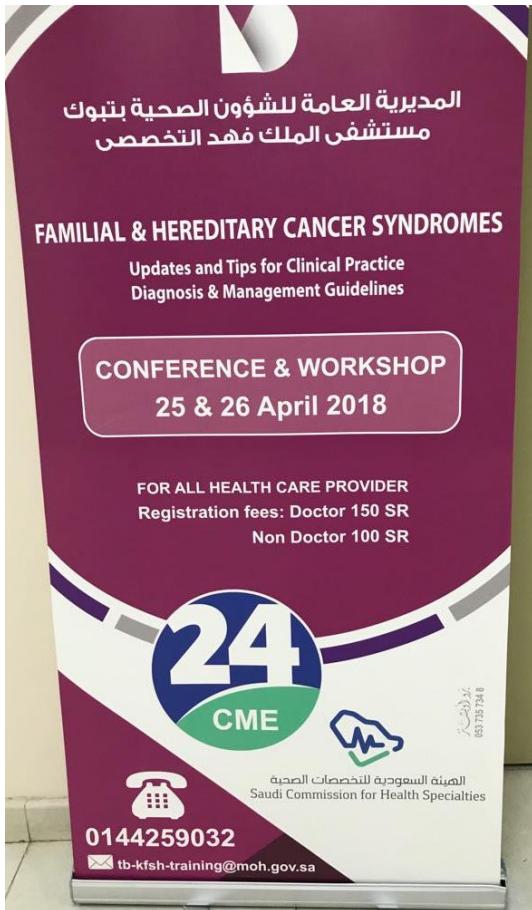
The research was conducted using a mixed-methods sequential explanatory design through survey and focus groups for students and physicians

The study concluded that Mobile devices have the potential to improve learning and practice in the clinical setting; however, a lack of transparency and misperceptions are limiting use. At the same time, there are concerns about ethics in student, physician, patient and carer use of mobile devices; for students and physicians, strategic gains in learning and practice sometimes outweigh ethics in individual decision making about use. To ensure that mobile devices can be used effectively, clear guidelines, communication and modelling of appropriate use are needed

CME ACTIVITY

Dr. Mohammad Mominul Islam

MPH, MSc. IC (Essex- In progress)
Ex-Head, and Consultant (privileged) for-
Department of Public Health (PH) and
Department of Infection Prevention & Control (IPC)
Chairperson, Infection Prevention and Control Committee (IPCC),
King Fahad Specialist Hospital, Tabuk, KSA



CUTANEOUS LEISHMANIASIS IN SAUDI ARABIA

Dr. Khalid Alhazmi

Dr. Khalid Alhazmi is Acting Assistant Professor, Department of Pathology at Faculty of Medicine, University of Tabuk. He can be contacted by email: kalhazmi@ut.edu.sa



INTRODUCTION :

Cutaneous Leishmaniasis (CL) is a cutaneous disease with varying clinical presentation, caused by single-celled parasite that is transmitted by the bite of an infected sand fly. CL is the most common form of leishmaniasis. It can cause skin nodules or sores which are usually self-healing, but it causes skin ulcers and disfiguring scars, those on the face can result in serious social and psychological effect.

Often, CL lesions appear over exposed parts of the body. The most commonly affected sites are the lower limbs 56.75% follow by the upper limbs 27.02% and face 10.81%. Nevertheless, it can occur rarely on the other sites of the body like the back or the groin area.

This infected disease exists in many temperate and tropical countries of the world. Approximately, 0.7 to 1.2 million new cases of CL occur each year worldwide, with about one third of cases occurring in each of the following three regions: the Americas, the Mediterranean basin, and the western Asia from Middle East to central Asia. It is a neglected disease affecting mostly people of poor communities in developing countries.

In Saudi Arabia, according to the Saudi Ministry of Health seven-year reports (2006–2012), the five most infected regions among the 20 Saudi provinces are El Qassim, AlMadinah Al-Munawarah, El Hassa, Riyadh and Northwestern area of Saudi Arabia[1].

The second form of Leishmaniasis is Visceral Leishmaniasis (VL). It is less commonly than CL but more serious and fatal if not diagnosed and treated correctly. It occurs when the Parasites infect the tissues of internal organs, especially Liver, Spleen, and Bone marrow.

The third form is called Mucocutaneous Leishmaniasis (ML). It is uncommon; but it can happen on the patients who have had cutaneous leishmaniasis when the Parasites infect the mucous membranes of the mouth, nose or larynx.

RISK FACTORS AND MODE OF TRANSMISSION:

CL is a vector-borne disease transmitted by the bite of an infected sand fly. Globally more than 90 sand fly species are suspected vectors of Leishmaniasis from over 800 species of sand fly are recorded [2]. However, only five species of *Phlebotomus* (The female *P. sergenti*, *P. papatasi*, *P. bergeroti*, *P. arabicus* and *P. alexandriare*) have been considered to be incriminated as vectors of CL in KSA. The main reservoir hosts and vector are *Ph. papatasi* [3–5].

In most endemic areas in Saudi Arabia, the causative organism was identified as *L. major*. Cutaneous leishmaniasis due to *L. tropica* is less prevalent compared to zoonotic CL caused by *L. major*. It occurs within small endemic foci in the west (Al Madina Al-Munawarah and Al Qassim) and southwest (high plateau of Aseer) provinces [5,6].

The life cycle is not complicated. It starts when the infected sand fly bites a normal human and injects small numbers of parasites inside his body through the skin. Then, the mononuclear blood cells react and start to phagocytose these parasites. This stage is called the promastigote stage. Once the parasite becomes inside the human mononuclear cells, the parasite enters the amastigote stage and begins to multiply and infect other cells and tissues (Figure 1). The sand flies get infected when they bite and feed on infected people or infected animals.

Leishmania can be transmitted as well from a pregnant mother to her fetus through the blood.

The major risk factor for leishmaniasis is being exposed to infected sand flies. In KSA, males were affected more than females with the percentages of 78% and 22%, respectively [7]. This could be explained by the Islamic ethics where the ladies cover their whole body by wearing Hijab. However, males are more exposed to sand flies because of their behavior and occupations. The majority of the affected expatriates were construction workers and laborers working in farms and fields [7]. The sand flies are more common in rural areas. There is no evidence to prove the validity of some false beliefs that saying: sleeping on the high bed protects against the sand fly bite. Spending nights at the periphery of towns, where the flies are abundant, will increase the incidence of CL. Factors that weaken the immune system (for example as malnutrition and infection with the human immunodeficiency virus (HIV)), usually increase the incidence and severity of this disease.

Life cycle of Leishmania

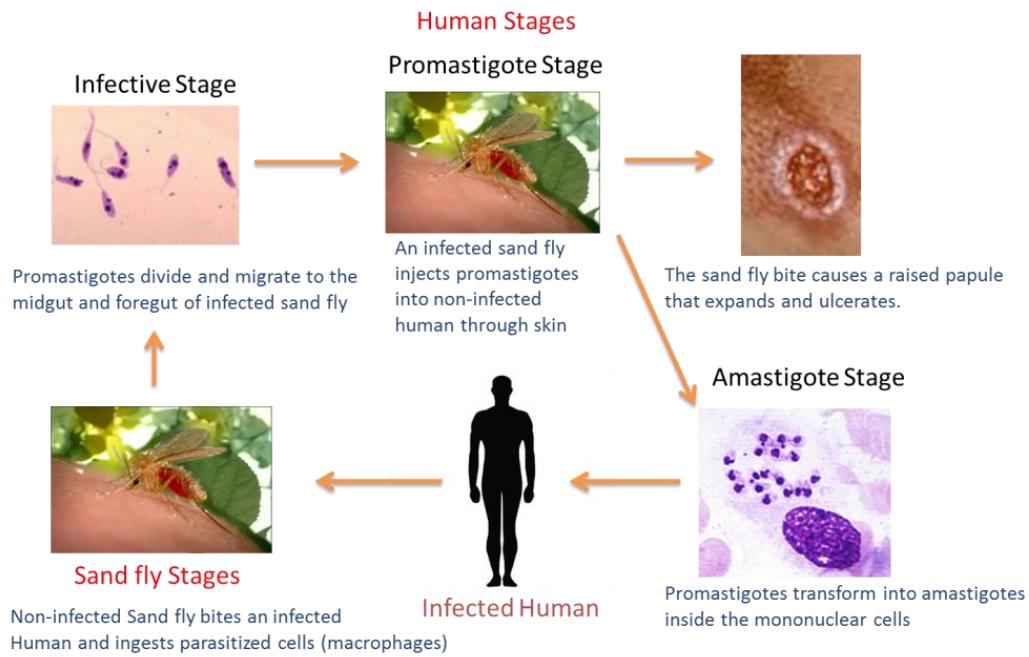


Figure 1 : Life cycle of Leishmania parasites showing the sand fly and human stages.

CLINICAL FEATURE

In cases of cutaneous leishmaniasis (CL), it takes several weeks to months for the lesion(s) to appear; the incubation periods for *L. major* and *L. tropica* are 2–8 months, respectively [2]. The site of the sand fly bite usually forms a raised papule that expands and ulcerates, with crust formation occurring at the center of the lesion(s). The face, neck, arms, and legs are the commonly affected sites and the lesions' size varies; smaller lesions (1– 2mm) are more frequent [4]. These lesions are painless, unless secondarily infected, and the patient may present with a single or multiple lesions. They take on a variety of appearances and may resemble acne, warts, or psoriasis. They may look like large scaly, ulcerated plaques, or form shallow ulcerated nodules. Enlargement of regional lymph nodes has been reported to occur in 10% of cases, and the dissemination through lymphatics may produce subcutaneous nodules connected with palpable thickened lymphatics; this is called sporotrichoid CL. In severe cases, known as diffuse cutaneous leishmaniasis, nodular lesions may occur widely and last for years or even for life.

Usually the lesions take over months to years to heal, leaving scars that often resemble old burns.

DIAGNOSIS:

In countries where the disease is common, patients with typical symptoms and signs can be diagnosed to have leishmaniasis clinically. However, a definite diagnosis of CL is a combination of clinical history, epidemiological data, and laboratory confirmation.

Skin biopsy and examining tissue under a microscope to detect the parasite is still the mainstay for diagnosis of CL and more accurate (Figures 2 and 3). Culture and molecular diagnosis allows identification of species. Recently, the mini- and microculture techniques are less in cost, and more sensitive in diagnosis but less effective in Leishmania typing [8, 9]. The PCR techniques have 100% specificity and 92.5% sensitivity in diagnosis of CL in the old world [10].

Antibodies in the blood can be detected using enzyme-linked immunosorbent assays (ELISA) but with less value because they are variably positive in CL.

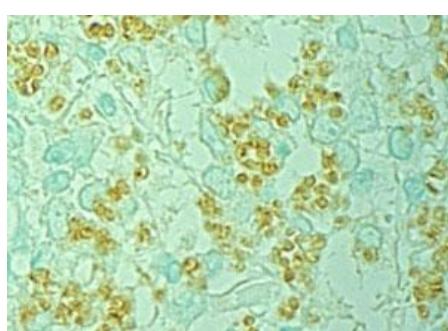
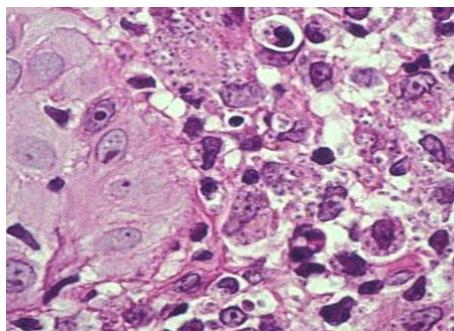


Figure 1 : A histopathologic slide shows amastigotes inside macrophage cells, on hematoxylin-eosin stain.

Figure 2 : A histopathologic slide shows a positive Immunostaining for intracellular amastigotes.

TREATMENT

CL is generally a self-limited disease, with spontaneous healing occurring over months to years (L. major within 4–8 months, L. tropica within 1 year or longer). Therapeutic interventions are most often used to accelerate the healing process, to narrow the period of transmission and to prevent the secondary bacterial infection.

Therapeutics for CL consist of local/topical (paromomycin ointment, imidazole ointment, local infiltration of lesion with antimonials), systemic (antimonials, azoles, miltefosine, amphotericin B and its formulations), and physical (e.g.,

thermotherapy, cryotherapy) interventions. Disfiguring scars can be treated by plastic surgery. The efficacy profile of these therapies varies depending on the type of therapy, the causing *Leishmania* species, and the geographical regions [11, 12]. The WHO recommended regimen of systemic antimonials for CL is 20mg/kg for 3 weeks [7].

In KSA, topical clotrimazole shows complete healing of the lesion in some patients (16%) [13]. Intralesional pentavalent antimonial therapies have high cure rates, but it is painful, sometimes requires local anesthesia. Intralesional antimonials have cure rates of 88% and 97% [14, 15]. The antifungal oral drugs, including fluconazole, itraconazole, and terbinafine, have been evaluated experimentally in KSA with a good result (16).

REFERENCES

1. Haouas N, Amer O, Alshammri FF, Al-Shammari S, Remadi L, Ashankyty I. Cutaneous leishmaniasis in northwestern Saudi Arabia: identification of sand fly fauna and parasites. *Parasites & vectors*. 2017 Dec;10(1):544.
2. World Health Organization. Control of the leishmaniasis: report of a meeting of the WHO expert committee on the control of leishmaniasis. InControl of the leishmaniasis: report of a meeting of the WHO expert committee on the control of leishmaniasis. 2010. World Health Organization.
3. Lewis DJ, Büttiker W. Insects of Saudi Arabia. The taxonomy and distribution of Saudi Arabian phlebotomine sandflies (Diptera: Psychodidae). *Fauna of Saudi Arabia*, Vol. 4. 1982:353-97.
4. Ibrahim AA, Abdoon AM. Distribution and population dynamics of *Phlebotomus* sand flies (Diptera: Psychodidae) in an endemic area of cutaneous leishmaniasis in Asir Region, Southwestern Saudi Arabia. *J Entomol*. 2005;2(Suppl 1):102-8.
5. Alahmed AM, Kheir SM, KHEREJI M. Distribution of sandflies (Diptera: Psychodidae) in Saudi Arabia.-Res. Bult Food Sci. Agric. Res. Center, King Saud Univ. 2010;171:5-23.
6. El-Beshbishi HA, Al-Ali KH, El-Badry AA. Molecular characterization of *Leishmania* infection in sand flies from Al-madinah Al-munawarah province, western Saudi Arabia. *Experimental parasitology*. 2013 Jun 1;134(2):211-5.
7. Peters W, Al-Zahrani MA. The leishmaniasis-a public health problem in Saudi Arabia. *Saudi medical journal*. 1987 Jul 1;8(4):333-43.

8. Abuzaid AA, Abdoon AM, Aldahan MA, Alzahrani AG, Alhakeem RF, Asiri AM, Alzahrani MH, Memish ZA. Cutaneous Leishmaniasis in Saudi Arabia: A Comprehensive Overview. *Vector-Borne and Zoonotic Diseases*. 2017 Oct 1;17(10):673-84.
9. Boggild AK, Miranda-Verastegui C, Espinosa D, Arevalo J, Martinez-Medina D, Llanos-Cuentas A, Low DE. Optimization of microculture and evaluation of miniculture for the isolation of Leishmania parasites from cutaneous lesions in Peru. *The American journal of tropical medicine and hygiene*. 2008 Dec 1;79(6):847-52.
10. Al-Hucheimi SN, Sultan BA, Al-Dhalimi MA. A comparative study of the diagnosis of Old World cutaneous leishmaniasis in Iraq by polymerase chain reaction and microbiologic and histopathologic methods. *International journal of dermatology*. 2009 Apr 1;48(4):404-8.
11. González U, Pinart M, Rengifo-Pardo M, Macaya A, Alvar J, Tweed J. Interventions for American cutaneous and mucocutaneous leishmaniasis.
12. Reveiz L, Maia-Elkhoury AN, Nicholls RS, Romero GA, Yadon ZE. Interventions for American cutaneous and mucocutaneous leishmaniasis: a systematic review update. *PLoS One*. 2013 Apr 29;8(4):e61843.
13. Larbi EB, Al-Khawajah A, Al-Gindan Y, Jain S, Abahusain A, Al-Zayer A. A randomized, double-blind, clinical trial of topical clotrimazole versus miconazole for treatment of cutaneous leishmaniasis in the eastern province of Saudi Arabia. *The American journal of tropical medicine and hygiene*. 1995 Feb 1;52(2):166-8.
14. Tallab TM, Bahamdan KA, Mirdad S, Johargi H, MOURAD M, Ibrahim K, SHERBINI AH, Karkashan E, Khare AK, Jamal A. Cutaneous leishmaniasis: schedules for intralesional treatment with sodium stibogluconate. *International journal of dermatology*. 1996 Aug 1;35(8):594-7.
15. Alkhawajah AM, Larbi E, Al-Gindan Y, Abahussein A, Jain S. Treatment of cutaneous leishmaniasis with antimony: intramuscular versus intralesional administration. *Annals of Tropical Medicine & Parasitology*. 1997 Dec 1;91(8):899-905.
16. Zakai HA, Zimmo SK, Fuoad M. Effect of itraconazole and terbinafine on Leishmania promastigotes. *Journal of the Egyptian Society for Parasitology*. 2003;33(1).