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Research Article

**STUDY OF THE CORRELATION OF LIGHTNING STRIKE  
WITH THE PATHOGNOMONIC SYMPTOMS: LICHTENBERG  
FIGURE**<sup>1</sup>Dr Nobia, <sup>2</sup>Dr Shahid Ameer, <sup>3</sup>Aqsa Munir<sup>1</sup>RHC Malka, Gujrat, <sup>2</sup>RHC Kot Mithan Rajanpur, <sup>3</sup>Jinnah Hospital Lahore**Abstract:**

*In this research study, a case is presented about the lightning strike. Post to the secondary assessment, there observed signs of Lichtenberg on the back and right leg. When there is massive rainfall, there observed lightning strikes. Most often, during the months of summer and spring, lightning strikes are the body of a person or his clothes, if died due to a lightning strike. However, figures of Lichtenberg may be present on the body and clothes may be burnt. In timely identification and fast treatment, during the physical assessment, these figures prove valuable if the patient has general amnesia and comorbid of cognitive dysfunction.*

**Keywords:** *Emergency Service, Lichtenberg Figure, Lightning Strike.*

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**INTRODUCTION:**

In between the clouds and earth, lightning is a release of electric potential in a release of electric potential in a zigzag fashion in the atmosphere. As it proceeds, it appears as branches [1]. A person can't be identified if affected by a lightning strike. However, as a result of the passage of the current through the body, the presence of fumigations may be damaged [2]. Among those people are subjected to death. The people are subjected to death. The people who survive become victim of inefficient cognitive functions and peripheral neuropathy. When there is massive rainfall, there observed a lightning strike. Most often, during the

months of summer and springs, lightning strike. However, figures of Lichtenberg and fern-like may be present on the body and clothes may be burnt [3]. Any damage or sign in the internal organ cannot be assessed independently if the examination of the corpse is carried out. Bleeding, fluid, hyperaemia and oedema were found in internal organs. In this research study, a person in an injured state was admitted to Hospital. He was analysed physically and amnesia was identified.

**CASE-REPORT:**

In this research study, the patient was male, whose age was 32 years.



Figures – I & II: Lichtenberg figures on the back of the case that developed as a result of a lightning strike



**Figures – III:** Lichtenberg figures on the back and leg of the case that developed as a result of a lightning strike.

One of his fellows took him to the Hospital when found senseless. The patient was evaluated physically. He was found normal. His pulse was 115 beats/minute, and blood pressure was 100/55 mmHg. The patient's laboratory assessment showed aspartate aminotransferase (AST) 60, troponin 10,612. Alanine transaminase was 16. The patient was found with abrasions on the right leg and back. And 14 was his Glasgow Coma Score (GCS). After these measurements, the patient was shifted to the emergency room for further examination. During the course of the examination, the patient was found with 1 Lichtenberg figure right leg and 3 such figures on the back. Therefore, the patient was hydrated (Figures-1 & 2). There observed general sinus rhythm in the ECG examination. Bladder catheter was set. On the second day of admission in Hospital, the level of consciousness of patient was recovered. It was illustrated that the patient was his friend and was busy in taming animals while the rain had begun at once. The patient was found with no issue. The patient's consciousness was restored and he recovered fully.

#### DISCUSSION:

Similar research was conducted in Turkey. There observed no considerable death as a result of a strike of lightning. Another study was organized in

Diyarbakir. In this study, out of 1441 cases, 10 (0.7%) were subjected to death due to a lightning strike. Between 1996 and 1998, the Diyarbakir Forensic Branch Office examined the corpse and dissected them [4]. The incidence of a lightning strike in those people is higher, who are connected to outdoor working. These people may include golfers, farmers, shepherd, walkers [5]. In a lightning strike, there are many physio-pathologic pathways. Due to this lightning strike, the victim may suffer from tissue damage due to initial explosion and proceeding injuries in a lightning strike, most of the current take away through the body, although person encounter strike for short duration of time. On the other hand, electricity destroyed tissues deeply and a person is exposed to strike for a long time [6]. The damage as a result of a lightning strike is complicated. Due to this, the victim may experience from burnt that is time-limited to a situation that can death [7]. Before anamnesis, the source of identification was Lichtenberg figures. These found many indications on the person's belongings which may include, wide burnt spots on clothes of the victim and the presence of metal objects (belt clip, buttons, zip etc.) on clothes. These objects after association. If the electricity made its way through skin, shoes and feet, the person's dress is burnt fully. Burning sport on the skin of a person can be

found due to synthetic materials, metallic objects and burnt clothes [8]. In our research study, burnt hair or clothes are the bases of indications. As compared to the assessment, the number of abrasions and deaths due to strikes of lightning may be high, when the geography of Turkey and socioeconomic and educational status of the people is considered [4]. Therefore, it is necessary to diagnose the damage caused by death and its treatment on time.

#### CONCLUSION:

Most of the time, in the identification, it requires some days. Since the first anamnesis is not taken completed. Therefore, it is necessary to examine these cases physically in detail.

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