

Case Report

Vitriolage: A Case of Acid Burn

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Abstract

Vitriolage means throwing of any corrosive, not necessarily sulphuric acid, on a person with malicious intent. Here we present a case of 18 years old girl Rubina who was a victim of acid burn due to refusal of love proposal. She was admitted in the One Stop Crisis Center (OCC) of Dhaka Medical College Hospital. Acid burn injuries involved left half of the face, left side of the chest, left side of neck, left arm and left eye. Investigation was done and she was treated with first aid after vitriolage by plenty of water and soap, thick paste of magnesium oxide and eyes are washed with water and irrigated with a dilute sodium bicarbonate solution and instilled of eyes by few drops of olive oil.

Key words: Vitriolage, OCC, Victim.

Introduction

The term vitriolage literally means throwing of the oil of vitriol (conc. sulphuric acid) on the body of a person with the intention to cause bodily injury.¹ Target groups are usually young and adolescent girls and women due to out of jealousy, revenge or enmity.² The chemicals used as vitriolage are corrosive acids or alkalis. Sulphuric acid is one of the commonest chemicals for this purpose and hence it is called vitriolage. Nitric and carbolic acids are sometimes used. The use of caustic soda, caustic potash, iodine and marking nut juice has also been recorded. These fluids are usually thrown on the face with the object of destroying vision or causing facial disfigurement and this result in grievous hurt.³ New laws have been passed to regulate the frequent use of acids which is a very good step taken by the government. Vitriolage is a great problem in Bangladesh. The alarming increase in its frequency is a cause of concern. The Government of Bangladesh and the people should try to protect it; otherwise it will make the nation lame. Violence against woman is a universal phenomenon but its manifestations differ from one society to another. Violence against woman within South Asia includes rape and sexual abuse, trafficking, prostitution, domestic violence, dowry related deaths and psychological abuse. The incidence of vitriolage seems to be highly prevalent among lower socio-economic groups both in urban and rural areas. The perpetrators are mostly young men and adolescent boys. The targets are primarily females between 12 and 25 years of age though recent trends have shown a change in the profile of targets with older women, children and sometimes men also being attacked. Acid violence is a particularly vicious and damaging form of violence in Bangladesh where acid is thrown in people's faces. The

overwhelming majority of the victims are women and many of them are below 18 years of age. The victims are attacked for many reasons. In some cases it is because a young girl or women has spurned the sexual advances of a male or either she or her parents have rejected a proposal of a marriage. Recently, however, there have been acid attacks on children, older women and also men. These attacks are often the result of family and land dispute, dowry demands or a desire for revenge. Existing laws: The Nari O Shishu Nirjaton Domon Act, 2000 is intended to address the need for more effective prosecution of perpetrators of violence against women and children provides redress for victims of various manifestations of violence including acid throwing.

Punishment- Lifelong imprisonment or Death Sentence. Effects of vitriolage are: The consequences of vitriolage are traumatic physically, psychologically and emotionally. The impact of it on skin is catastrophic. It causes the skin tissue to melt, often leaving the bones underneath exposed. Permanent physical disfigurement is inevitable. Many survivors lose their sight in one or both eyes and sometimes even their hearing if the ears have been exposed to acid. Following vitriolage a dramatic change in their life style occurs. Most of them have to give up their education or previous work because of the time required for their recovery and the debilitating disfigurement that occurs. Social isolation and fear almost always follows the incident which further reduces their confidence. Causes of vitriolage are: 1) Failure in love. 2) Refusal of marriage proposals. 3) Rejection in sex. 4) Vengeance and unmet dowry demands. 5) Family dispute 6) Dispute with respect to property or service. 7) Jealousy or revenge of any causes. 8) Exemption from punishment.

9) Dishonesty of police authority and their non-cooperation inspire the miscreants to commit such type of offence.

Case Report

The victim named Rubina, 18 years old girl from khilkhet Dhaka. After taking permission from the concern authority interview was given. According to the statement of the victim, she was a student of class twelve. From her home to college, Kabir, a cycle maker, approximate age 25 years, tries to offer proposal of love for some months before the incident occurs. But she refused strongly to make any relation with Kabir and told him that this is a matter of prestige to her. Finally Kabir said that he would take revenge of refusal of love. After that one night she was reading at her room, one side of the window was opened. Suddenly, she felt throwing of liquid substance to the left side of her face and a man like Kabir was running away quickly from her window. The bottle was recovered from the place of throwing and that is now under the custody of police. She was admitted in Dhaka Medical College Hospital and accordingly she was admitted in One Stop Crisis Center (OCC) of the hospital for treatment and legal aid. On General examination: Pulse -80/min, regular. BP -110/80mm of Hg, Heart -NAD, Lungs- NAD, Anemia -Nil, Cyanosis -Nil, Koilonychias -Nil. On local examination: Acid burn injuries are present on 1. Lt. Half of the face with Lt. Eye 2. Anterior wall of the chest 3. Upper part of the lateral chest both side 4. Rt. And Lt. arm and forearm. On local examination- It is evident that ulcer is present at the affected part which has a distinctive color. Skin is destroyed at and below the site of contact and signs of splashing is found but no sign of singeing. The above-mentioned finding indicate that the injury is caused by some form of chemicals preferably acid suggested by history and findings. Findings of investigations are: 1. CBC: Hb%- 9.5 gm./dl, ESR- 60 mm 1st hour, WBC- 15,600/c.mm of blood, N- 80%, L-15%, M-03%, E-02% 2. RBS-8mmol/L, 3. B.urea -23 mg/dl, 4. S.Creatinine-9 mg/dl 5. S.Electrolytes: Sodium -1134 mmol/L, Potassium -511 mmol/L, Chloride -102 mmol/L, TCO2-23.5mmol/L 6. Blood Group-B+ve, 7. S.Total Protein -7.4 gm/dl, 8. S. Albumin - 4.6 mg/dl 9. S. Globulin -2.8 gm/dl 10. A.G. Ratio -1.6:1. Treatment order on admission: 1) Diet- Normal. 2) Inj. TT- 2nd dose after one month. 3) Inj. TIG. 4) Tab. Isocloxin (400 mg) 1+0+1. 5) Tab. Clobam (10mg) 1 tab at H/S. 6) Diclofen Supp. (50mg) 1 stick P/R. 7) Inj. Emodol (30 mg) 1 amp IM. 8) Tab. Ascason 1 tab, BD. For Eye: Okacin Eye drop for L/E- 3 drops 4 hourly, Spersade eye drop I/E-02 drops 1 hourly for 2 days, 02 drops 6 hourly for 20 days,

Ascason Eye drop L/E- 1 drop 12 hourly. Renamycin eye Ointment apply 3 times/day. Proposed operation: Split type of skin Grafting (STSG).

Discussion

When this unexpected occurrence happens everybody should think first about medical treatment in DMCH, Monwara and City Hospital then legal assistance and finally rehabilitation. Acid Survivors Foundation plays a great role with respect to this. Rehabilitation for vitriolage are: 1) Lodging of family members and survivors in Dhaka City to prevent the re-attack of perpetrators and better treatment in Dhaka. 2) Help from NGO in various aspects and treatment facilities by plastic surgeons. 3) Legal help. 4) Vocational training. 5) Sponsor vocational treatment at home and abroad. 6) Donation of medicines and medical equipment by solvent people. 7) Donation of blood. 8) Support the expenses of a survivor and take care of medical/ social needs. 9) Create employment opportunity at private and government levels. 10) Donate household items e.g. clothes, furniture, bedding, crockery etc. needed for the survivors.

Circumstance of the incident

Self-inflicted burns with corrosive are rare, though these may be ingested for self-destruction. The motive being suicide. Some persons sometimes try to commit suicide by self-infliction of flame burns upon themselves. They usually pour kerosene over their body and clothing and set themselves on fire. Most of the victims are female. The scene is commonly the Kitchen. Severe burns usually occur. A motive for suicide is usually apparent. No such features are found in this case. Accidental burns with corrosive may occur on persons handling such chemical without proper precautions in places like chemical factories, laboratories, warehouses etc. Bursting of the container with splashing of the corrosives on the face, neck and hands may occur resulting in serious burns. A history in that regard is usually available. This victim was talking at the time of the incident, so this is not an accidental burn. Assaults with mineral acids are still done in some parts of the world. Throwing of corrosive such as sulphuric acid (battery fluid) upon the enemy in order to cause permanent disfigurement and harm is one of the favorite methods of taking revenge. The findings in this case are consistent with the history. Therefore, assault is likely to be in this case. From the history it appears that the assailant wanted to take revenge himself. According to the law prevalent in Bangladesh the punishment of such crimes as vitriolage is sentence to death. Homicidal with corrosives is not known. Vitriolage can be prevented by: 1) Passing of proper laws by the parliament. 2) Rapid verdict and implementation or punishment by special

tribunal. 3) Regulation of sale of acid. 4) Raise awareness in community and society. 5) Encourage participation of men against violence to women and children. 6) Sensitize media reporting and ensure protection of privacy of survivors. 7) Improve networking and agencies or bodies supporting rehabilitation of acid survivors. 8) Consoling potential attackers with special focus on adolescent boys.

Conclusion

Acid violence is a worldwide phenomenon that is not restricted to a particular race, religion or geographical location. It occurs in many countries in South-East Asia, sub-Saharan Africa, the West Indies and the Middle East and there is anecdotal evidence of attacks in other regions. In many countries acid attacks constitute a hidden form of violence against women and children that often goes unreported, and the true number of horrific attacks taking place has only come to light after in-depth research by ASTI and its part.

The Government of Bangladesh has started to take serious steps and making strict laws. Different NGOs are working seriously and helping the victims in every step. Public consciousness is increasing against this brutal act. So, we do hope that incidence of acid attack or vitriol age will reduce to minimum within few years.

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