#### Case report:

#### A Case Report On Vitriolage

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#### Abstract:

Vitriolage is an extreme form of violence in Bangladesh. The alarming increase in its frequency is a cause of concern. Violence against woman within South Asia includes rape and sexual abuse, trafficking, prostitution, domestic violence, dowry related deaths and psychological abuse. The reported case is of a 25 years old lady affected by acid burn in her face and adjoining part of the head during night while she was sleeping. On medicolegal point of view, the injury was homicidal in nature to run away without having a motive to kill the person. We should create public consciousness against this sort of brutal act.

Keywords: Vitriolage; homicide; OCC.

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# **Introduction**:

Acid throwing also called acid attack or vitriolage is a form of violent assault.<sup>1-2</sup> It is defined as a act of throwing acid on to the body of a person with the intention of injuring or disfiguring her/his out of jealousy or revenge resulting in burning & dissolution of the victim's skin, connective tissue and even bones.<sup>2</sup> The long term consequences of these attacks include blindness and permanent scarring of the face and body, along with far reaching social, psychological and economic difficulties.<sup>1</sup>

In Bangladesh, on 17<sup>th</sup> March 2002, Government approved 2 Acts, The Acid Control Act 2002 & The Acid Crime Prevention Acts 2002 (1<sup>st</sup> & 2<sup>nd</sup> Act), "restricting import & sale of acid in open markets.....Capital punishment of the acid thrower & penalty of up to Tk.1 lakh." "The Act punishes the unlicensed production, import, transport, storage, sale & use of acid by a Jail term of 3 to 10 years & a fine of up to taka 50,000/=. The national Acid Control Council (NACC) & District Acid Control Committees (DACC) were established under this act.

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 to 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.

# Case Report:

A female of about 25 years old was brought by the authority of Acid Survivors Foundation to the One Stop Crisis Center (OCC) of Dhaka Medical College Hospital (DMCH) affected by acid burn in her left half of the face with left eye, anterior wall of the chest, upper part of the lateral chest both sides, right and left arm and forearm on 09/09/15 around 10

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a.m. According to her statement, for few days some miscreants of their locality were moving around her & proposed to sex with them. She rejected without hesitation. On 08/09/15 when she was sleeping with her husband and children, the miscreants threw acids on them. She was mostly affected and her children were slightly affected.

On examination, partially healed burn in her left half of the face with left eye, anterior wall of the chest, upper part of the lateral chest both sides, right and left arm and forearm. Then she was admitted to DMCH for better management. On local examination, it is evident that ulcer is present at the affected part which has a distinctive color. Skins are destroyed at and below the site of contact and signs of splashing are 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.

# Ethical Clearance:

This case report was approved by ethical committee of DMCH prior to submission.

#### Discussion:

The most notable effect of acid attack is the lifelong disfigurement. Eyelids may be burned off or deformed having the eyes extremely dry & prone to blindness. Nose can be shrunked & deformed; eating can become difficult. In addition to the medical effects, acid victims also face the possibility of septicemia, renal failure, skin depigmentation & even death. Moreover, acid survivors who are single when attacked almost certainly become ostracized from society, usually ruining marriage prospects.

 $H_2SO_4$  is commonly used hence the term vitriolage which is derived from oil of vitriol, other acids are also employed for vitriolage. In case of vitriolage there is discoloration & staining of the skin & clothing along with trickle mark over the body. There is ulceration & scar formation over the contaminated area of the body due to damage of nerve ending. These are comparatively painless lesions with absence of vesication & redline of demarcation.<sup>3,4</sup>

The purpose or motive is to disfigure the face, destroy the vision or to cause bodily injury or disfigurement of body or ever destroy the costly garments or to take revenge. Victims are objects of hatred, rivalry, jealous or enmity. It consists of throwing of strong  $\rm H_2SO_4$  or any concentrated mineral acids, corrosive alkalis, carbolic acid over face or body of the victim. Sometimes it causes local burning pain. These injuries heal slowly with scar formation and thus cause permanent disfiguration when thrown to face or other body parts. Thus if the victim survives with any of such outcomes the act of vitriolage may amount to the causation of grievous hurt. Death is rare, but may result from shock, toxemia or infection, when there is involvement of extensive area. Stain present on skin cloths with blackish brown color in  $\rm H_2SO_4$  injury and yellow in nitric acid injury.<sup>5</sup>

Management of patient are done by removal all contaminated clothing & irrigation with water or saline over the affected parts for at least 15-30 min. Magnesium oxide or carbonate applied to thick paste over the affected area. Eye injury should be dealt with retraction of eyelid & irritation for 15-30min with normal saline or ringer lactate or water; subsequently few dropped into eye. Corneal ulcers are to be treated with atropine ointment, hydrocortisone & antibiotic. For pain, analgesic like morphine may be given. Respiratory distress may be due to laryngeal edema & can be treated with 100% O<sub>2</sub> inhalation & if needed could be done later on using plastic surgery<sup>-2, 6</sup>

Following vitriolage a dramatic change in their life style occurs. Most of them have to give up their education and 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.

When this unexpected occurrence happens everybody should think first about medical treatment in DMCH for legal assistance and finally rehabilitation. Acid survivors Foundation plays a great role with respect to this.

# **Conclusion**:

Acid attack is a more serious crime as it destroys both physical and mental health and it is no meaning lesser than the rape victim. Acid attack would appear to be a worse offence and should carry a great penalty to the accused with strict and severe punishment. It is only through a revival of cultural values, moral regeneration, strengthening of holistic education and use of publicity that change can be made in the society. It is more important that the male members of social media should play a proactive role in ensuring the safety of the women. The Government has started to take serious steps and making strict laws'. Different NGOs ate 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 vitriolage will reduce to minimum within few years.

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# **Authors' Contributions:**

Data gathering and idea owner of the study: Tamanna Tasmin

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Editing and approval of final draft: Tamanna Tasmin, Nasreen Akther, Asma Begum

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