

## Case Report

# A Report of a Dyadic Death with Father as Perpetrator

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### ABSTRACT

Murder-suicide also referred to as homicide-suicide, or dyadic death, is the term used for unlawful killing or killings together with the suicide of the assailant. Homicide-suicides are relatively uncommon and vary from region to region.

This is a report of a homicide-suicide of a father and daughter utilising *Datura* seeds and ligature constriction.

**Key Words:** Dyadic death; Murder-suicide; Homicide-suicide; *Datura*

### INTRODUCTION

Murder-suicide, homicide-suicide, and dyadic death all refer to an incident where a homicide is committed followed by the perpetrator's suicide almost immediately or soon after the homicide.<sup>1,2</sup> Marzuk et al classified murder-suicide as a homicide followed by the suicide of the assailant within a week, typical cases where the victim and assailant are known, and the suicide of the assailant rapidly follows the killing of the victim.<sup>1</sup>

The Hanzlick-Koponen typology has the following special classifications, which can be divided into two broad categories: single victim and multiple victim events. According to this, single victim events (dyadic deaths) include homicide-suicide or suicide pacts.<sup>3</sup> The most common type of dyadic deaths involve killing of intimate partners, and perpetrators are male in most of the cases.<sup>4</sup>

*Datura* (Jamestown weed/Jimson weed/thorn apple/stink weed/devil's weed/angel's trumpet) is a plant deliriant, the seeds of which are commonly used for 'stupefaction' of victims in robbery/rape, as well as involved in accidental, suicidal and homicidal poisoning. It is a small, coarse shrub with a strong and rather unpleasant smell belonging to family Solanaceae. It grows to a height of 3 to 5 feet and has a handsome foliage of dark green, ovate, pointed leaves and large tubular (trumpet-shaped) flowers. The fruit capsule is spherical with soft spines and contains 50 to 100 dark brown, reniform (kidney shaped) seeds which resemble chilly seeds.<sup>5</sup>

**The Case:** A father and daughter were found lying dead in the room of a tourist resort. The daughter was about 8 years old, and was found dead on a bed, while her father aged about 35 years was on the floor in supine position with legs covered by a blanket and tied with a plastic zip-tie. His face, neck and chest were covered with a green towel with a zip-tie around the neck (**Fig 1**). The door was locked from the inside, the scene was intact, and no suicide note was found. History revealed that the male deceased's wife had died a year ago, and that he had been working as a chief engineer in a multi-national company in Singapore. He had come on a holiday to spend time with his daughter.

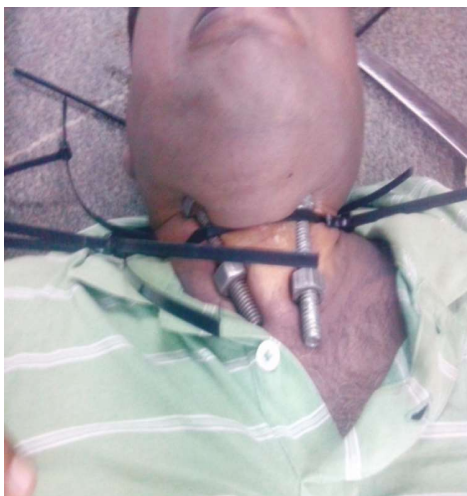
A case was registered by the police, and both the bodies were sent to our institute hospital for autopsy.



**Fig 1:** Towel on the body of deceased adult with a zip-tie around the neck

#### Autopsy Findings in the Father

1. External examination: Face congested, tongue partially protruded and bitten, legs covered with blanket and tied with a plastic zip-tie. Beneath the towel covering the neck there were two metal bolts on either side of the trachea with two plastic zip-ties compressing the neck strongly (**Fig 2**). On removal of the ligature material (plastic zip-tie), a complete transverse ligature mark was found present, as well as an imprint of the bolts on either side of the trachea.
2. Internal examination: All internal organs were congested, petechiae were present in the white matter of the brain, surface of the lungs and the heart. Cut section of lungs caused exudation of dark, fluid blood. Stomach contained about 100–120 flat, brown, kidney-shaped seeds, and the mucosa was mucosa



**Fig 2:** Two zip-ties on the neck with metal bolts

congested (**Fig 3**). Structures underneath the ligature mark were pale and glistening; thyroid cartilage and hyoid bone were intact.



**Fig 3:** Stomach of deceased adult with Datura seeds

#### Autopsy Findings in the Child

1. External examination: White coloured froth was present in both nostrils (**Fig 4**). There were no injuries on the body.
2. Internal examination: Brain, lungs, and kidneys were congested. Stomach contained about 200ml of cream-coloured fluid, mucosa was congested; there was no unusual smell.

Blood and viscera samples from both cases were sent to the forensic science laboratory for chemical analysis.

#### Chemical Analysis Report

1. Father - Alkaloids of Datura were detected in the stomach and its contents, but not in blood, kidneys and liver.

Cause of death was given as 'asphyxia as a result of compression of neck with a ligature material'.



**Fig 4:** Froth in the nostrils of deceased child

2. Daughter - Alkaloids of Datura were detected in the stomach and its contents, kidney, liver and blood. Cause of death was given as 'Datura poisoning'.

## DISCUSSION

In this case, a bizarre dyadic death was perpetrated by a qualified engineer involving himself and his young daughter. History revealed that his wife had died a year back, because of which he had gone into depression, and had been under treatment for the same.

Datura is a deliriant plant, the seeds of which are quite commonly used by criminals as a 'stupefying agent' on victims of robbery, rape or kidnapping. The seed extract is a complex substance having a nitrogenous base with the following alkaloids: atropine, hyoscyamine and hyoscyne. These alkaloids first stimulate the higher centres of brain, followed by motor centres and finally cause depression and paralysis, especially of the vital centres in the medulla. The seeds have been rarely used as suicide and homicide agent because of the bitter taste and burning sensation in the throat, oesophagus and stomach.<sup>6</sup> In Ayurveda, Datura is one among the 10 upavishas (semi-poisons)<sup>7</sup>, while historically Acharya Susrutha has mentioned it as an antidote for Alarka visha (rat bite).<sup>8</sup>

Milroy et al have reported that of 52 cases of homicide-suicide pacts studied, common causes are breakdown in a relationship (46%), mental illness (21%), physical ill health (11%) and financial stress (10%).<sup>9</sup> Bossarte et al observed that shooting (80.4%), sharp weapon injury (11%), hanging (6%), poisoning (4%), fall from height (3%), burns (1%), and vehicular injuries are common methods of suicide in perpetrators of dyadic deaths.<sup>10</sup> In the Indian scenario, financial burden and marital disharmony are the principal reasons for dyadic deaths. Such suicidal tendencies are now commonly seen in farmers due to agrarian crisis and unemployed youths making them vulnerable populations.<sup>11,12</sup> In this case, the perpetrator committed suicide by an unusual method of self constriction of the neck, while homicide was accomplished by poisoning with Datura.

When comparing homicides with dyadic deaths, research suggests that the perpetrator is more likely to commit the latter when the motive is related to possessiveness/jealousy, sickness or stress, and these incidents are more likely to be premeditated than a homicide alone.<sup>13</sup>

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