A unique case of electric circular saw suicide with injuries to the chest and abdomen

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ABSTRACT

This case report discusses the previously unreported situation of a suicidal death, with injuries to the chest, by means of an electric circular saw. A review of the English and German literature provides an overview of common sites of injury, gender and psychiatric status in power saw related deaths.

Keywords:

Suicide, Electric circular saw

INTRODUCTION

Suicidal deaths utilising electrical power saws are exceedingly rare with 20 cases having been reported in the English and German literature [1-13]. Furthermore the use of electric circular saws is a subset of this group with only 6 cases identified. This case is unique in that a circular saw has been used to inflict fatal injuries upon the chest and abdomen. Exsanguination has resulted primarily from injuries to the heart and the liver. The case findings are documented and a review of the literature is provided. A table is produced which includes gender, the type of power saw and the site of the injuries.

CASE REPORT

A 45 year old man was found lying on his back with a pillow under his head. Next to him attached to an extension lead, plugged into the laundry, was an electric Makita circular saw (Example- Figure 1). A suicide note was present in the kitchen. The post mortem examination revealed three

largely horizontally oriented incised lesions aggregating in a central focus over the lower chest and upper central abdomen (Figure 2). These varied in length from 21 to 25 cm and resulted in a lesion affecting the pericardium, with a 9cm right ventricular lesion as well as injuries to the mediastinum, diaphragm, stomach, ribs and liver. Three lesions in the liver varied in length from 5 to 17cm. There were bilateral hemothoraces with one liter of blood in each cavity. No signs of previous self harm such as cuts on the wrists were present. Toxicology studies were negative except for a low level of the drug mirtazapine which is used in the treatment of depression. The cause of death was listed as exsanguination from circular saw incised injuries to the chest and abdomen.

DISCUSSION

This is the only identified case in the English and German literature where a suicidal death has been caused by the use of an electric circular saw to inflict injuries to the chest and abdomen (see Table 1). The literature shows that nearly all suicides with power operated saws involve either the head or

Figure 1. Example of a Makita circular saw.

Figure 2. Lower chest and abdominal injuries.

Table 1. The table documents age, gender, type of power saw, the site of injuries and whether there was a history of psychiatric illness.

Author	Age	Sex	Type of Saw	Main injury site	Psychiatric Illness
Betz	33	F	Circular Saw	Neck	Yes
Betz	45	F	Circular Saw	Left Arm	Yes
Grellner	29	F	Circular Saw	Neck	Yes
Judd	47	M	Circular Saw	Head	Yes
Asano	32	F	Circular Saw	Neck	Yes
Dolenc	44	M	Circular Saw	Head	Yes
Reuhl	31	M	Chain Saw	Neck	Yes
Tournel	32	F	Chain Saw	Neck	Yes
Segeberberg-Kontinnen	54	M	Chain Saw	Chest	Yes
Grellner	30	F	Chain Saw	Neck	Yes
Campman	69	M	Chain Saw	Neck	Yes
Campman	27	M	Chain Saw	Neck	Yes
Schiwy-Bochat	19	M	Chain Saw	Head	Yes
Betz	54	M	Band Saw	Head	Not stated
Betz	48	F	Band Saw	Head	Yes
Clark	37	M	Band Saw	Neck	Yes
Gloulou	41	M	Band Saw	Neck	Yes
Gloulou	47	M	Band Saw	Head	Yes
Härtel	34	M	Band Saw	Head	Yes
Härtel	41	M	Band Saw	Neck	Yes

the neck. One case of injury to the arms is noted [1]. Another case involved a knife injury to the chest followed by the use of a chain saw to the chest resulting in a pneumothorax and exsanguination but no injury to the heart or other internal organs [4]. Generally powered saw suicides have shown a predominance of male victims. With circular saw related deaths there is a different pattern with a greater number of female deaths. It is noted that the numbers are however quite low. As is in this case there is, as expected, a background of psychiatric disease, with a previous diagnosis of depression and the use of mirtazapine.

With any unexpected, unusual trauma related death, consideration should always be given to whether or not the events relate to a

homicide. In this case the event appears to have been planned taking place in an unobstructed area in the garden behind the house, with a suicide note, use of an extension cord, and the placing of a pillow under the head.

CONCLUSION

This case appears to be unique where a suicidal death has resulted from severe injuries to the chest and abdomen by utilising an electric circular saw. The majority of cases in the literature describe powered saw deaths involving injuries to the head and neck.

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