

195 Clepington Road,

DUNDEE,

Angus,

Scotland.

May, 1970.

Dear Sir,

I have a problem relating to forensic pathology and since I have a very limited knowledge in this field I am writing to seek your advice. I have also written to other forensic pathologists for their opinion on the matter. The problem concerns the wounding of an individual and the possible causal agent of the wound.

The wound concerned was a small round wound in the lower third of the anterior neck almost directly in, a little to the right of, the midline. It was approximately 5 mms. in diameter (hole plus surrounding skin damage) with the edges neither punched out nor particularly ragged, although they were a little irregular; blood was oozing slowly from the wound and tended to obscure the details of the edges. There was minimal tissue damage surrounding it on the skin. The wound was situated $1\frac{1}{2}$ inches above the sternal notch, at the site where a tracheotomy is usually performed. In fact, a tracheotomy was performed in this case - incision through the skin revealed underlying damage; there was a small ragged laceration of the anterior right lateral aspect of the trachea at the level of the 3rd tracheal ring (corresponding in position to the skin wound). The trachea was deviated slightly to the left, such that it was necessary to divide the strap muscles on the left side in order to gain access to the trachea for insertion of a tracheotomy tube.

It was noted, through a laryngoscope, that there was some discolouration of the lateral edge of the larynx, swelling and/

and haematoma; there was minimal deviation of the larynx to the left. There was considerable haematoma in the right lateral aspect of the neck and right superior mediastinum, with considerable contusion of the anterior neck muscles. There was free air and blood, with some frothing, in the right superior mediastinum but there was no large vessel injury at this level. There was a good deal of soft tissue damage where, apparently, the causal agent of the wound had gone between the trachea on the right side and the strap muscles which were closely applied to it. There was no visible injury to the lung or pleural space, with no evidence of a haemothorax or pneumothorax, but autopsy revealed an area of contusion, measuring 5 cms. at the point of maximal involvement, at the apex of both the right lung and pleura.

The skin wound was not unlike the site of entry of a high velocity bullet, but there was no bullet in the wound, or in the body; and there was no evidence of powder burns round the skin wound.

There was also damage to the individual's clothing:- $\frac{7}{8}$ " vertically below the button and button-hole line of the shirt, in the overlapping parts of the shirt, there was a ragged tear, orientated vertically, approximately $\frac{1}{2}$ " in height. The fibres of the cloth were protruding outwards. There was also a horizontal elongated nick, on the wearer's left side, in the knot of the neck-tie (corresponding in position to the shirt holes). These fibres were not disturbed in any characteristic fashion. There was no metallic residue found round the tears in the shirt or tie.

There is the obvious possibility that this wound was caused by a bullet, but due to the absence of a bullet in the wound, /

wound, the nature of the clothing tears and the fact that there was no metallic residue found round the edges of the clothing tears, I believe that a bullet may not have inflicted the damage. I have a theory which I would like to put to you:-

I believe the causal agent may have been a rose-stem; in the close vicinity of the individual were some roses, the ends of the stems of which were cut obliquely in the normal fashion, producing a sharp point with a flat "bevel" angled away from the point (giving much the same profile as the end of a hypodermic needle). The rose stems having the approximate diameter of the skin wound, I would like to hear your opinion as to the possibility of a rose-stem piercing the shirt cloth, in the overlapping parts, also nicking the tie, puncturing the skin of the neck at approximately the level of the 3rd tracheal ring, passing in to create the small ragged tear to the trachea, passing between the neck muscles and trachea on the right side, contusing the muscles and deviating the trachea slightly to the left; then creating the contusions to the apex of the right lung and pleura (possibly due to movement of the stem whilst in the individual; then, on removal of the stem, leaving the approximately 5 mm. diameter wound with edges being neither ragged nor clean cut, blood slowly exuding. Removal of the stem back through the shirt would presumably bring the fibres of the cloth outwards.

I realise the theory is dependant upon a number of factors, such as the strength of the rose-stem, speed of movement of the stem, etc., so I am writing to ask you for your opinion of the feasibility of the theory, the indications, contra-indications, factors involved etc.

For/

For example, in your opinion, do rose-stems have the ability to do the damage inflicted, especially with regard to strength of the rose-stems? The roses concerned were just ordinary roses, stems cut obliquely as noted above.

Does this theory account for all the damage inflicted? I do not know of the capabilities of these stems, that is why I am writing to you; do normal rose-stems have the ability to penetrate skin? - under what conditions can this occur?

I would like to hear your opinions as to the possibility of a rose-stem inflicting the damage, under what conditions it is possible, if at all, and the various limiting and dependant factors involved.

I hope that these questions are not an inconvenience to you with regard to time consumption; but I have such a limited knowledge of forensic medicine that I must seek the advice of experts such as yourself in order to obtain the answers to the problems which puzzle me. I look forward to hearing from you in the near future.

I thank you most gratefully,

Yours faithfully,

Mr. C. Longbottom

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May 21, 1970


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Dear Mr. Longbottom:

This will acknowledge your letter of May 4. I reviewed your problem and we have cut a number of rose stems about the size that you indicate. We have no previous experience with this but if the stem was fairly dry and the force applied as a result of the fall was great, I think there is a possibility that what you suggest is possible. I would point out, however, that missiles such as bullets are very difficult to find in this area and I wonder if an X-ray was taken to eliminate the possibility of a hidden bullet.

I'm afraid I've not been very helpful, but perhaps somebody you have corresponded with has had more experience with this sort of thing than I have.

Very sincerely yours,


Geoffrey T. Mann, M.D., LL.B.

GTM/jl