



Bending Bullet- Beyond Imagination – A Case Report

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Abstract

There are innumerable circumstances when a firearm injury has been presented in different forms. Some injuries are considered to be clean, where as others are twisty and bizarre in presentation. Examples may be quoted as ricocheting of bullet, single entry wound and multiple exit wounds, single entry wound but no exit wound presumably bullet vanishing suddenly. The present case report deals with the case in which the bullet has struck the shin of right lower extremity causing fracture and bending of bullet at the level of its neck.

Key words: *bending bullet, ricocheting, fracture tibia, low velocity*

Background of the case

A patient Mr. XYZ aged 22years/male, student, resident of civil line area district Aligarh, came to the Emergency Section of J N Medical College, Aligarh, alleging that he has been shot from a close range on the anterior aspect of right lower leg. On quick examination it was found that he was stable, conscious and well oriented to time, place and person indicating that he was not in dire emergency category.

R/R-18/min,

Pulse- 78/min

Pupils- Bilaterally normal reacting to strong beam of light

Temp- Afebrile.

Psychological and mental examination: He was in state of compose mentis, slightly disturbed but not frightened. He could not stand on his leg and was supported by others in this endeavor.

Case report

Physical examination:

Vitals: BP-124/78 mm of Hg



Fig. 1 The entry aperture, wide orifice showing beveling of wound



Fig. 2 X'ray film of right lower extremity depicting deformed bullet on the medial aspect of tibia

On external examination: A fire arm entry wound of (2.5x1.5cm) present over the anteromedial aspect of right leg, 5cm above the right ankle joint.

Wound description:

- Beveling(+)
- Margin inverted.
- Burning, blackening absent.
- Tattooing(+)
- No sign of singeing and soiling of wound.
- Marginal abrasion(+)

Discussion

There was no evidence of struggle, which indicated that he had been shot without getting embroiled in physical struggle. This fact was supported by absence of disheveled hair, disturbed and mud stained cloth, loose buttons, bruises or abrasions¹. Therefore, his statement of being shot from a distance was acceptable². The interesting part of this phenomenon was that upon x-ray right lower leg AP view, bullet was found to be lodged in the leg musculature about 3 inches below the upper part of tibia medial aspect³. Spiral fracture was found to be 2.5 inches below the nose of bullet⁴. The fracture site indicates the site of bullet hit.

The interesting and amazing aspect of the case report is that there is a clear bending of blunt-nosed tip of the bullet at the level of its neck. This is unlikely because during manufacture no constriction or ridge is made at this level which could have possibly contributed toward its deformity.

However since this has happened it demands a reasonable scientific explanation. On re-creation of the scene of occurrence presumably this could have happened:

- The assailant fired the bullet from a distance of 12-16 inches and during the melee of fight and commotion the shot was misdirected and the bullet struck the hard road initially⁵. (This could not be verified because the scene of crime was not visited by any of the authors)
- Upon striking the hard surface the bullet ricocheted⁶, struck the lower leg at the level of lower 1/3rd and middle 1/3rd of tibia.
- Because some momentum was lost in between the primary impact and second impact of bullet only minute green stick fracture was caused.
- Upon striking the hard tibia bone the bullet again ricocheted with a weak force and velocity invading the musculature and finally resting there after traversing up and

taking a summersault bringing the deformed tip of the bullet pointing downward.

- v. The beveling of wound points towards the necessity of analyzing the range and direction of fire. The beveling is directed antero-medially and upwards. Beveling of wound directed upwards indicates that ricocheting⁶ has taken place otherwise the shooter would have to practically lie on the ground and take an upward shot.

By all logic and reasoning this could have been the recreated sequence in which the bullet after first ricocheting lost its tremendous impacting force and what followed has been the result of minimal resistance.

Conclusion

Case reports in fact are meant for learning and educating others on aspects of juxtaposed atypicality. This case report qualifies that purpose. In ordinary course of nature such a shot should have struck the tibia causing multiple fractures, may be comminuted fractures, and bullet enmeshed at the level of destruction. But this did not happen in this case.

This case report amply demonstrates that the presentation must not be negated simply because deviation from the ordinary has taken place. The authors urge that the scene should be recreated to the best possible means followed by an explanation. Finally the explanation should be such that it should be admissible and defended in a court of law.

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