CONCLUSION
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The following conclusions were drawn from the present study:

1. Jhansi (U.P.) contributed to the highest number of tetanus cases (148 cases) from the Bundelkhand region, in this hospital. Shivpuri and Tikamgarh (M.P.) contributed to 34 and 32 cases respectively after Jhansi. Cases also came from Jilaun (U.P.), Madipur (U.P.), Latal (M.P.), Lalitpur (U.P.), Gwalior (M.P.), Bhind (M.P.) and Sagar, in that order.

2. Tetanus cases comprised of 1.21% of total hospital admissions in P.L.B. Medical College Hospital, Jhansi (U.P.) from January 1988 to December, 1988. Tetanus deaths accounted for 8.67% of total hospital deaths.

3. Most tetanus deaths occurred within the first week of admission, the peak incidence of deaths being on the 1st and 2nd days of admission. Maximum recovery of the patients occurred between the 6th and 9th days of admission, remaining nearly constant till the seventeenth day. Late deaths probably due to secondary complications occurred after the 13th day of admission.

4. Out of the total tetanus patients admitted, adults had the highest incidence (34.69%) and the children, the lowest (31.84%). Neonates contributed to 33.47% of tetanus cases.
The highest mortality was found in neonatal tetanus (82.92%) and the lowest in childhood tetanus cases (28.20%). Adults had a mortality of 42.35% due to tetanus.

5. The incidence of tetanus was more common in males in all the age groups (197 male cases as compared to 88 female cases in total). Among neonates the male:female ratio was the highest (5.31:1). The overall male:female ratio was 2.27:1. Mortality was nearly the same in both sexes (M:F 1.06:1) though female children had a slightly higher mortality (M:F 1.56).

6. Urban areas contributed to a lower incidence of tetanus (87.8%) and a higher mortality (66.65%) whereas rural areas contributed to a higher incidence (91.42%) and a lower mortality (50%).

7. In neonates and children there was a definite seasonal variation. Tetanus neonatorum was most prevalent during the monsoon season. In children the incidence was highest in summer months. In children there was also a high incidence during the winter months (September to December).

8. The incidence and mortality of tetanus were the highest in the low socio-economic group of patients (63.96% and 59.78% respectively).
9. There was a higher incidence of tetanus among rural students/children, labourer/farmers and housewives. Mortality was high in a cobbler, shepherd and a potter (100% each), labourers (41.66%) and housewives (41.37%).

10. Trauma was the commonest cause of tetanus in adults and children (20.41%) followed by otopathogenic infections (9.79%). In 17.14% of patients there was no obvious cause. Tetanus following burns, post partum infection, boils and trauma had a high mortality (it was 100%, 50%, 50% & 44% respectively).

11. Tetanus neonatorum carries the highest mortality (82.62%).

12. In tetanus neonatorum the lesser the patient's age, the more were the chances of mortality. Most neonatal deaths occurred between 4 to 11 days of age on admission and most recoveries beyond 11 days of age on admission.

13. Mustard oil and ash were the commonly used applications on the umbilical cord (30.49% & 9.7% of cases respectively).

14. All neonates were delivered mostly by untrained dai or elderly lady at home and unsterile shaving blade was the commonest instrument used for cutting the umbilical cord (89.02% of cases) in neonates.
15. In adults the shorter the duration of symptoms were before admission, the worse was the prognosis. Where the duration was beyond 7 days, prognosis was the best.

16. Lock jaw, neck rigidity, dysphagia and convulsions were the usual presenting features in adults & children. Inability to suck and excessive crying were the usual features in neonates.

17. Tétan风云 mortality increased with increasing grades of severity of tétan风云. In grade I tétan风云 mortality was zero and in grade V 86.20%.

18. The shorter the incubation period, the worse was the prognosis of tétan风云 patients. (70.43% mortality was present with incubation period of less than 7 days, & with more than 21 days incubation period, 12.5% mortality was observed).

19. A shorter period of onset was associated with a worse prognosis. Where the period of onset was absent, mortality was the lowest (6.33%) and where it was less than 24 hours mortality was the highest (76.47%).

20. Higher mortality was observed in tétan风云 patients with raised temperature (99°F or above on admission or within 24 hours of admission).

21. Tétan风云 mortality increased with increasing severity of risus sardonicus.
22. Increased mortality was found in tetanus patients with increasing severity of neck rigidity.

23. Mortality in tetanus patients was proportional to the severity of dysphagia on admission. Increasing dysphagia was associated with worse prognosis (86.60% mortality with severe dysphagia).

24. Increased mortality was observed with increasing severity of lock jaw in tetanus patients on admission.

25. Tetanus mortality was directly related to the severity of spasms on admission. Without spasms the mortality was 6.66% whereas with severe spasms it was 80.99%.

26. T.I.G. was only effective when it was given as early as possible on admission. It was useless if administered on or beyond the IIIrd day of admission (mortality was 100%).

27. In tetanus therapy intrathecal administration of T.I.G. was more beneficial (mortality 45.32%) as compared to intramuscular T.I.G. (mortality 88.23%).

28. Intrathecal T.I.G. was more effective in all grades of severity of tetanus as compared to intramuscular T.I.G. in the same grades. Furthermore T.I.G. was most effective in milder cases of tetanus when used intrathecally (mortality 5.26%).
29. Higher doses of T.I.G. were more effective in lowering tetanus mortality. The mortality was 47.12% with a dose of 500 I.U. of T.I.G. Tetanus mortality was reduced to 38.46% with doses of 1000 I.U. Mortality fell to zero with doses of T.I.G. between 1500 I.U. and 3500 I.U. (only 7 patients were studied in this group as only they could afford it).

30. There was a higher incidence of tetanus in 1988 (285 cases) as compared to that in 1983 (176 cases). Mortality fell down from 68.53% in 1983 to 51.42% in 1988 with the use of intrathecal T.I.G. (in 1983 only a.T.S. was used).

31. Respiratory spasms leading to severe apnoea was the most important cause of death in tetanus. Pulmonary complications including acute secondary lung infections topped the list of complications in tetanus patients.