Haemorrhagic Septicaemia

Prelims: *Current events of national and international importance | Species*

Why in news?

At least 10 blackbucks have died at a zoo in Jharkhand's Jamshedpur due to a bacterial infection - Haemorrhagic Septicaemia (HS).

- **HS –** It is an acute, ***highly fatal bacterial disease*** that affects water buffaloes and cattle in tropical regions.
- **Caused by – Bacteria** - ***Pasteurella multocida*** serotypes B:2 (Asia) and E:2 (Africa). The disease is also known as ***Pasteurellosis***.
- **Symptoms –** Fever, dullness, reluctance to move, profuse salivation, serous nasal discharge, severe respiratory distress, protrusion of the tongue, painful swelling of the throat, and diarrhoea.
- **Geography –** *Endemic* in India, Southeast Asia, Africa, Middle East; sporadic in Europe.
- **Host –** Mainly affects cattle and water buffaloes, occasionally it affects camels, elephants, horses, donkeys, yaks, various species of deer, pigs, sheep and goats, etc.
- **Transmission –** Ingestion or inhalation via direct contact, fomites, contaminated feed/water, through respiratory secretions, etc.
- **Seasonality –** Worst epidemics occur during monsoon rains (high humidity & high temperature).
- **Incubation Period –** Usually few hours to days but some animals can carry the organism for varying periods without symptoms.
- **Mortality rate –** Animals usually collapse and died within 6–48 hours, animals with clinical signs, particularly buffalo, rarely recover (May be **as high as 80%).**
- **Treatment –** Timely antibiotic treatment can cure clinical cases ***if started early.***
- Various sulfonamides, tetracyclines, penicillin, and chloramphenicol (where its use is permitted) are effective.
- **Prevention –** Key preventive measure, using inactivated P. multocida

vaccines, especially before monsoon, segregate the sick animal from healthy ones, avoiding overcrowding, etc.

In Humans – *While P. multocida can infect humans, the specific serotypes causing HS (B:2, E:2)* ***haven't been confirmed*** *to infect people, but caution is still advised.*

It is listed by the World Organisation for Animal Health (OIE) as a ***major transboundary animal disease***.

References

1. The Hindu | 10 blackbucks die due to 'bacterial infection'
2. Indimmune | Haemorrhagic Septicaemia
3. MSD Veterinary | Hemorrhagic Septicemia

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