The use of adjunctive steroids in adults with Herpes simplex encephalitis.


**Background**

Herpes simplex virus (HSV) encephalitis is associated with adverse clinical outcomes in 50% of patients. The use and impact of adjunctive steroids in improving the prognosis of this devastating disease is unknown.

**Objectives**

1) To describe the use of adjunctive steroids in HSV encephalitis.
2) To explore clinical factors associated with the use of steroids.
3) To assess the impact of steroids on outcomes

**Methods**

A multicenter international retrospective study of adults (age>15 years) with confirmed HSV encephalitis.

An adverse clinical outcome was defined as death or survived with sequelae.

**Results**

1) A total of 438 adults with HSV encephalitis proven by HSV PCR were enrolled. The mean age was 50.58 years (15.94, SD), 226 (51.6%) were female and the median Glasgow coma scale was 14 (13-15, IQR).

Temporal lobe abnormalities on magnetic resonance imaging (MRI) were seen in 200/340 (58.8%); 140 (70%) with unilateral findings.

2) A total of 73 (16.6%) patients received adjunctive steroids. Adjunctive steroids were given more frequently to patients with:
- fever (84.5% vs 66.7%, P=0.003),
- seizures (38.3% vs 17.3%, P <0.001),
- abnormalities on MRI (77.7% vs 61.8%, P=0.017),
- lower mean Glasgow coma scales (10.42 vs 11.3, P=0.013)
and had a longer length of stay (median duration of 23 days vs 20 days, P=0.012).

3) Adjunctive steroids were not associated with an impact on adverse clinical outcomes (46.6% vs 46.9%, P=0.95).

**Discussion**

Adjunctive steroids are used in 16.6% of patients with confirmed HSV encephalitis.

Use of adjunctive steroids in HSV encephalitis is most commonly seen in sicker patients with fever, seizures, lower Glasgow coma scales, more abnormalities on MRI of the brain, and a more prolonged length of stay. Adjunctive steroids was not associated with an impact

In clinical outcomes

**Limitations and Further Study**

As the study is retrospective in nature, it is subjected to propensity bias.

A randomized clinical trial should be done to further investigate the role of steroids.

**Conclusion**

Adjunctive steroids in HSV encephalitis are used more commonly in the sicker patients and is not associated with a benefit in clinical outcomes.

**References**