Etiological Spectrum and Clinical Profile of Combined Arterial and Venous Stroke: A 10-Year Tertiary Centre Study

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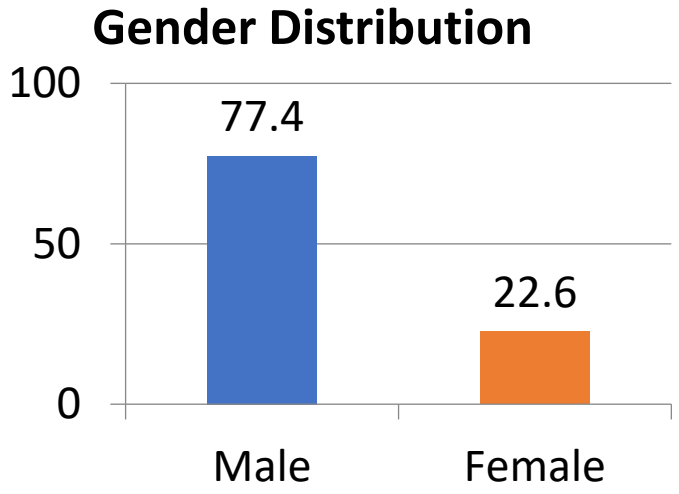
Aims

To evaluate the etiological spectrum in patients with combined arterial and venous strokes.

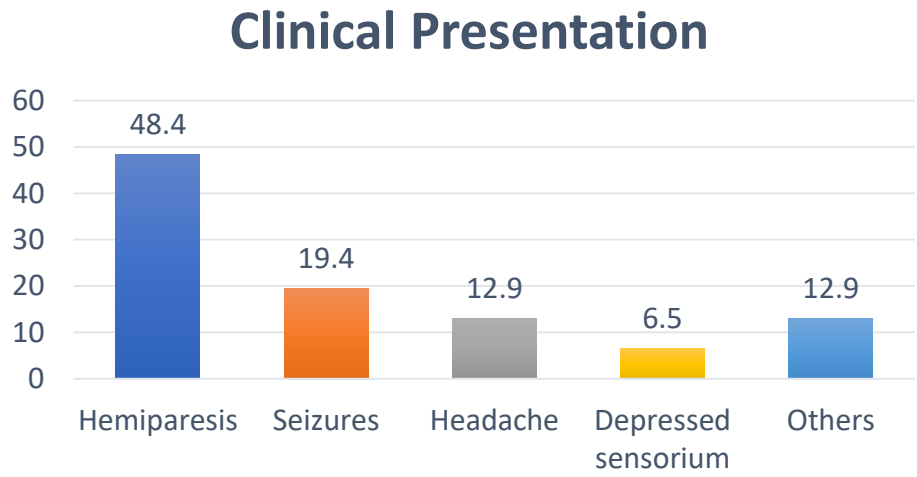
Materials & Methods

- This was a retrospective observational study at a tertiary care centre over 10 years
- We reviewed demographic details, comorbidities, clinical features, imaging findings, genetic results and treatment details of patients with simultaneous or sequential arterial and venous strokes

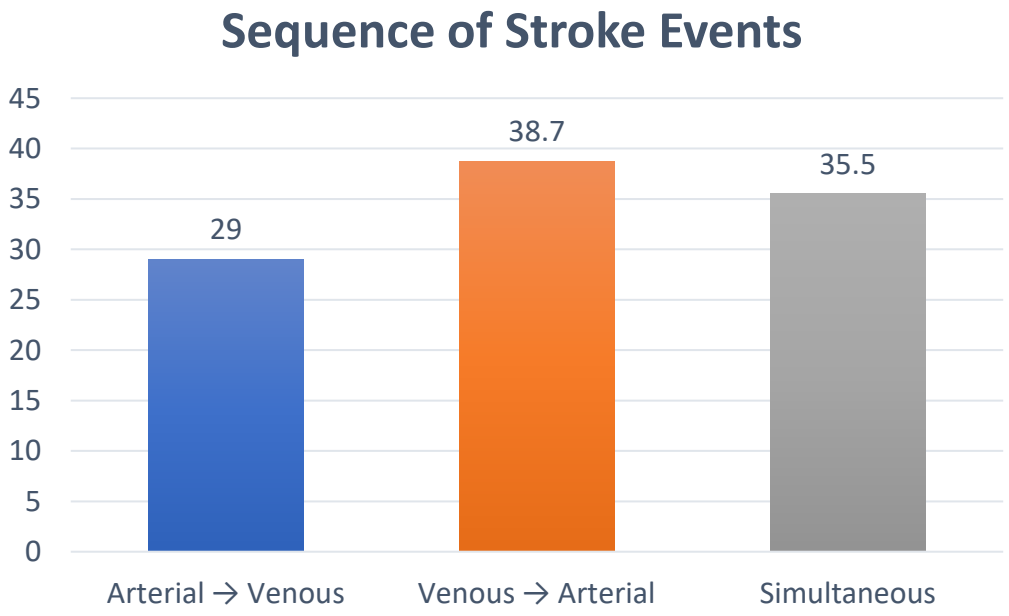
Results

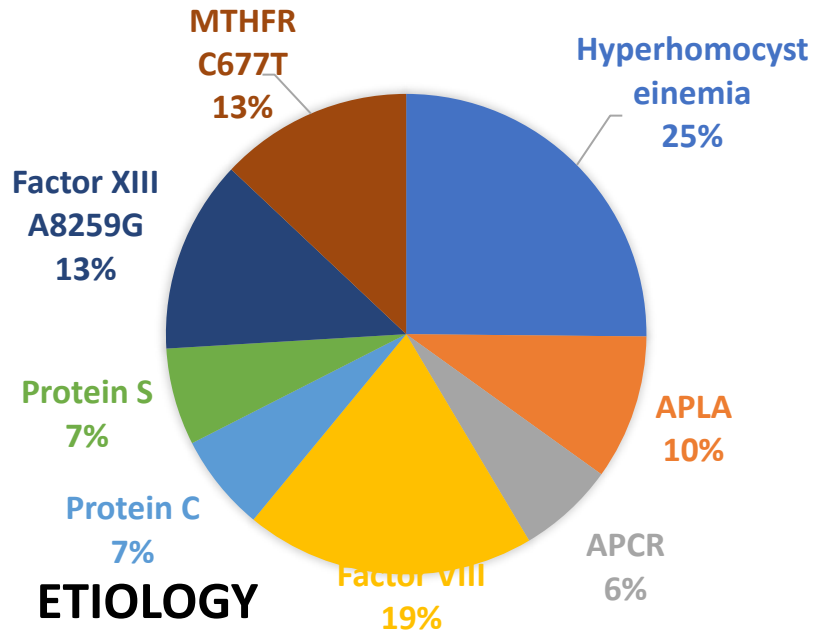


Patient Profile: Gender Distribution



Clinical Presentation





Results:

- Over a 10-year period, 31 patients were identified with combined arterial and venous stroke; 77.4% were male and 22.6% female.
- Simultaneous occurrence was noted in 11 patients (45.4%).
- Hyperhomocysteinemia was the most common etiological factor (25.8%), followed by cryptogenic causes (22.6%), prothrombotic states (19.4%), polycythemia, and malignancy.
- The most frequently detected genetic mutations were Factor XIII A8259G and MTHFR C677T
- Anticoagulation therapy remains the mainstay of treatment, with immunomodulatory therapy considered in select cases

Conclusion:

- Concomitant arterial and venous stroke is often linked to systemic prothrombotic conditions.
- A notable proportion of cases remaining cryptogenic underscores the need for advanced diagnostics.
- Multidisciplinary evaluation is essential for accurate diagnosis and effective management, and early recognition and tailored strategies are crucial in preventing recurrence