

INTRAVASCULAR LYMPHOMA IN THE STROKE UNIT

PROPOSAL OF A DIAGNOSTIC TOOL TO UNVEIL THE MIMIC

L. Bruno, M. Bagnato, A. Mascolo, E. Dolcetti, F. Buttari, M. Diomedì
 Università degli Studi di Roma «Tor Vergata» - I.R.C.C.S. «Neuromed» (Istituto Neurologico Mediterraneo Pozzilli)



RATIONALE

Intravascular large B-cell lymphoma (IVLBCL) is a rare form of lymphoma characterized by selective growth of lymphoma cells within the lumen of small blood vessels. In some cases, it may have a clinical and radiological presentation similar to that of an ESUS (Embolic Stroke of Undetermined Source). The clinical course of the disease is aggressive, and the prognosis is poor. If diagnosed and treated early, the prognosis may change.

OBJECTIVES

Identify a diagnostic pathway for the correct classification of ischemic stroke with ESUS pattern that facilitates the early diagnosis of intravascular large B-cell lymphoma (IVLBCL).

MATERIALS & METHODS

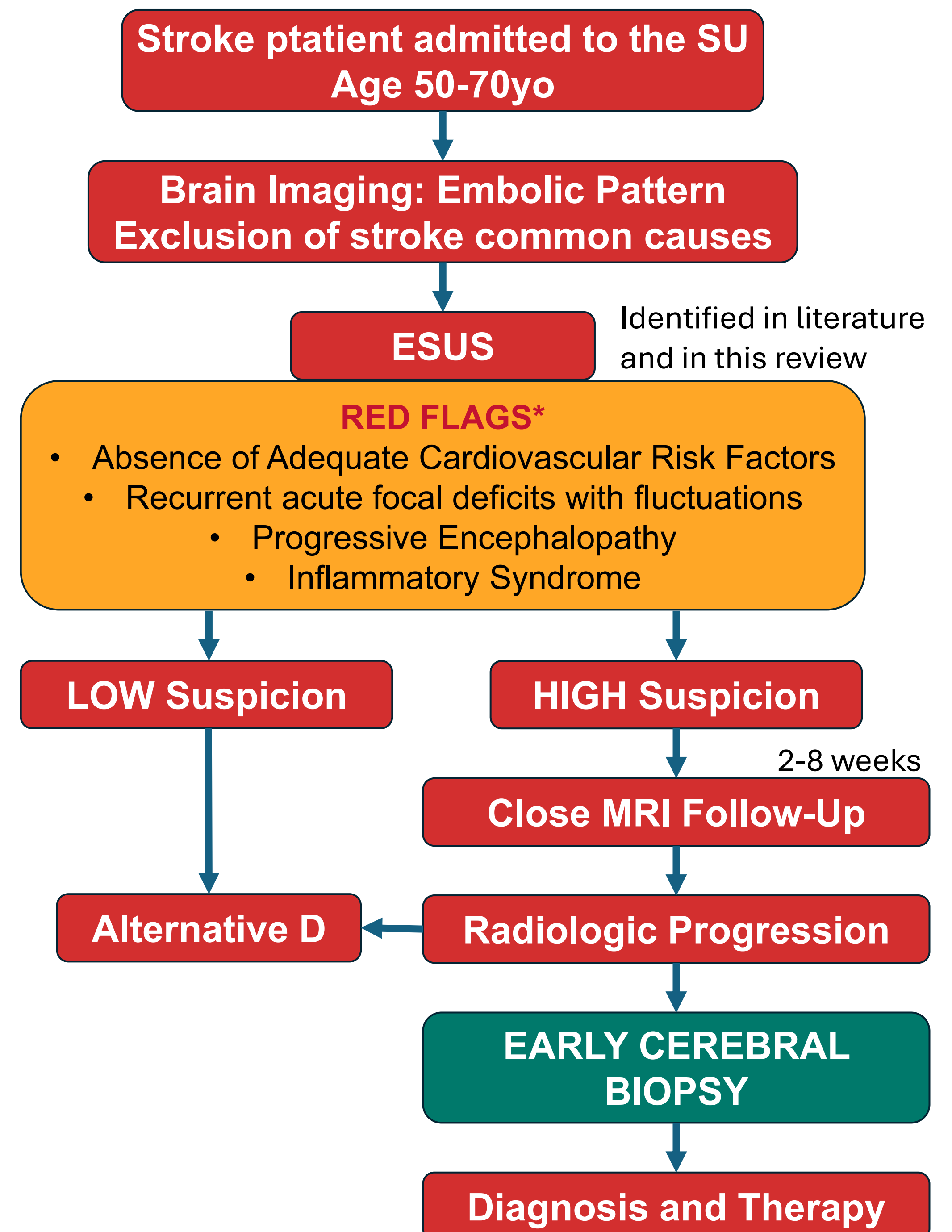
Narrative Review of Case Reports found in online databases.

Inclusion criteria:

- Onset with acute ischaemic event with ESUS pattern
- Diagnosis of IVLBCL
- Adequate clinical and radiological data
- At least one brain magnetic resonance imaging (MRI) scan

Descriptive and comparative statistical analysis (R software).

DIAGNOSTIC ALGORITHM



RESULTS

N=31

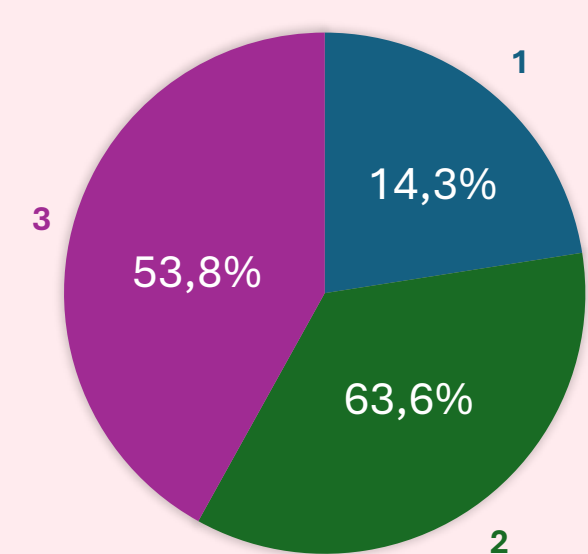
Average age of onset=64.8±8.6

Women=51.6%

Common cardiovascular risk factors= 45,2%

Potential sources of embolism= 12,9%

NUMBER OF MRI

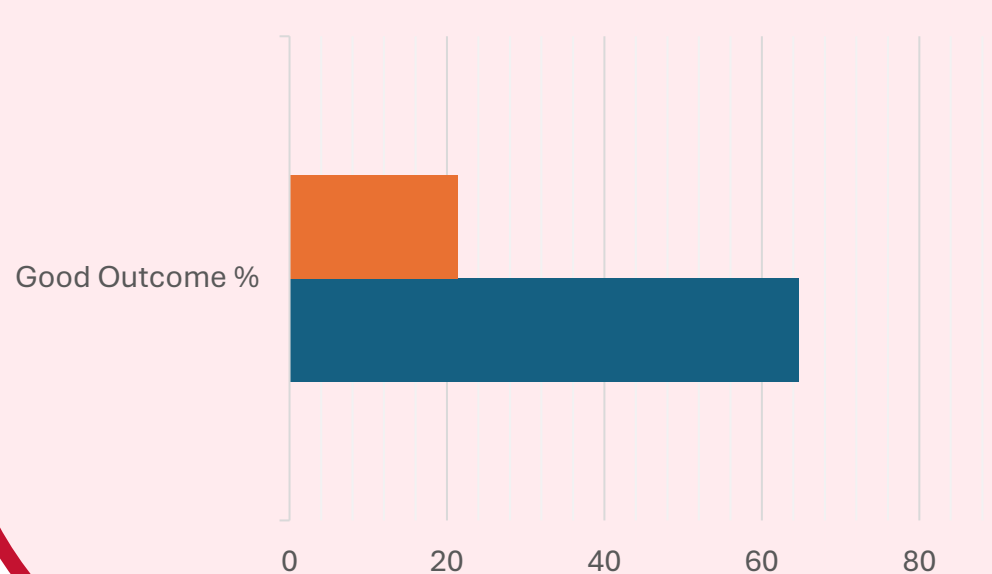


Radiological progression (Increases in ischemic lesions of number and size)= 91,7%

Good Outcome (3-month survival with clinical and radiological improvement)= 48,4%

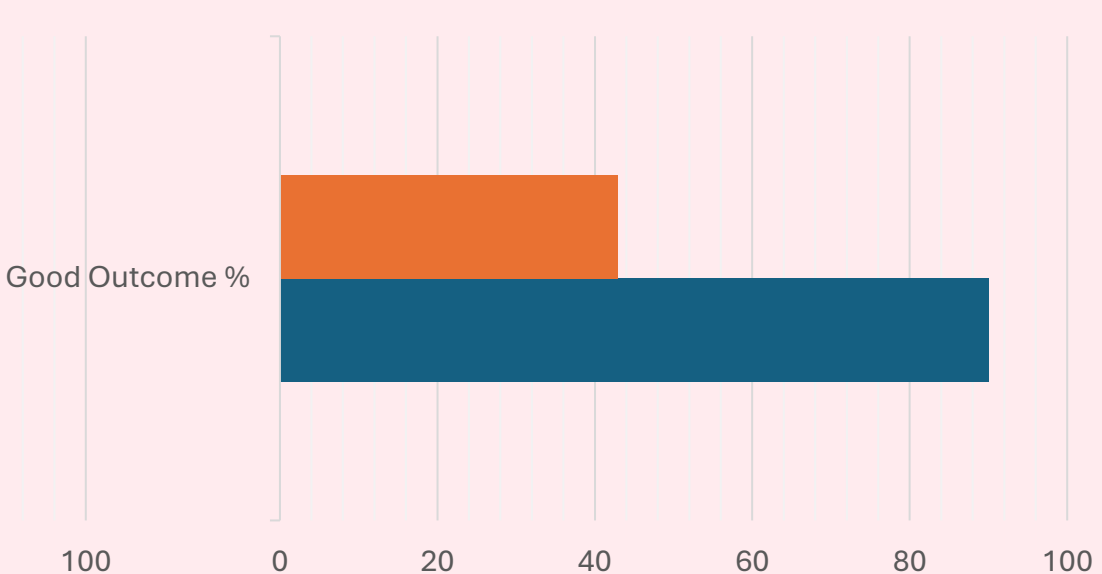
Cerebral Biopsy and Goot Outcome

W/O Biopsia W/ Biopsia



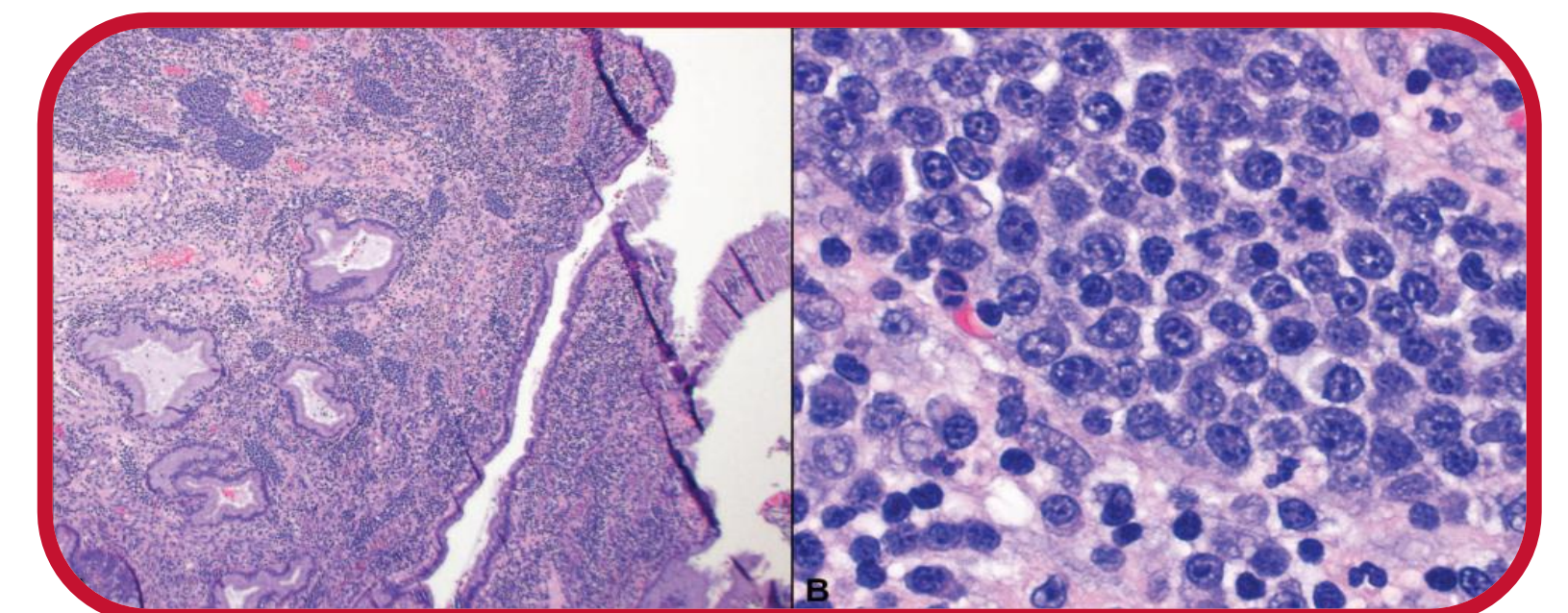
Biopsia Precoce vs Tardiva

Late Biopsia Early Biopsy



CONCLUSIONS

We propose a diagnostic algorithm for selected ESUS patients with close radiological follow-up that allows for adequate reassessment without diagnostic delays. Early tissue diagnosis through brain biopsy improves outcomes in cases of suspected IVLBCL.



BIBLIOGRAPHY

1. Bhagat R, et al. Intravascular Lymphoma-Associated Stroke: A Systematic Review of Case Studies. *Cureus*. 2023 Dec 21;15(12):e50896.
2. Davis JW, et al. Intravascular Large B-Cell Lymphoma. *Arch Pathol Lab Med*. 2022 Sep 1;146(9):1160-1167.
3. L. Bruno, et al. What is stabbing that brain? An hematological disorder from a neurovascular perspective, a case series Abstracts of the 54th Annual Conference of the Italian Society of Neurology. *Neurol Sci* 45 (Suppl 1), 1-582 (2024).