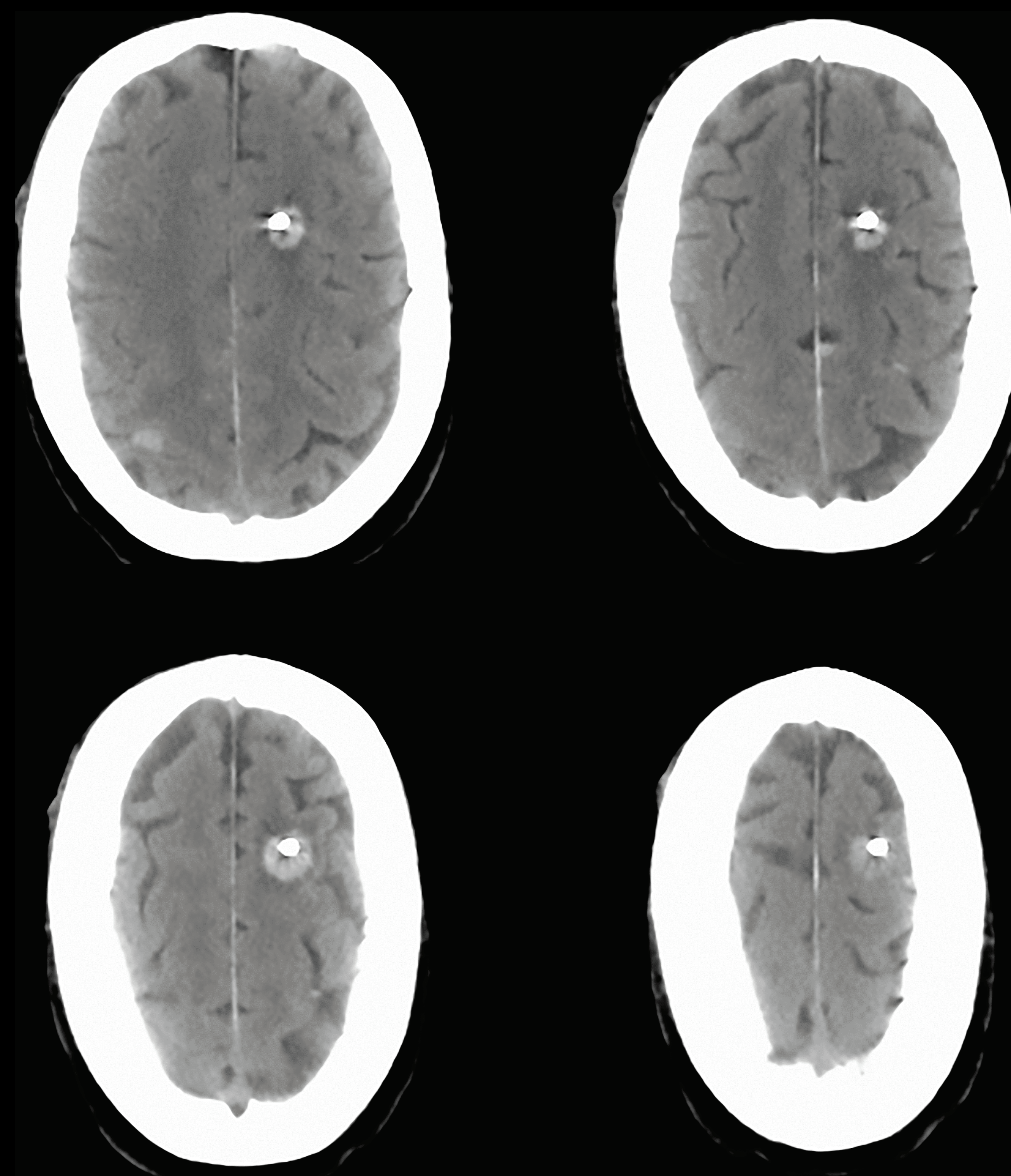


RATES OF TRACT HEMORRHAGES AFTER EXTERNAL VENTRICULAR DRAIN PLACEMENT

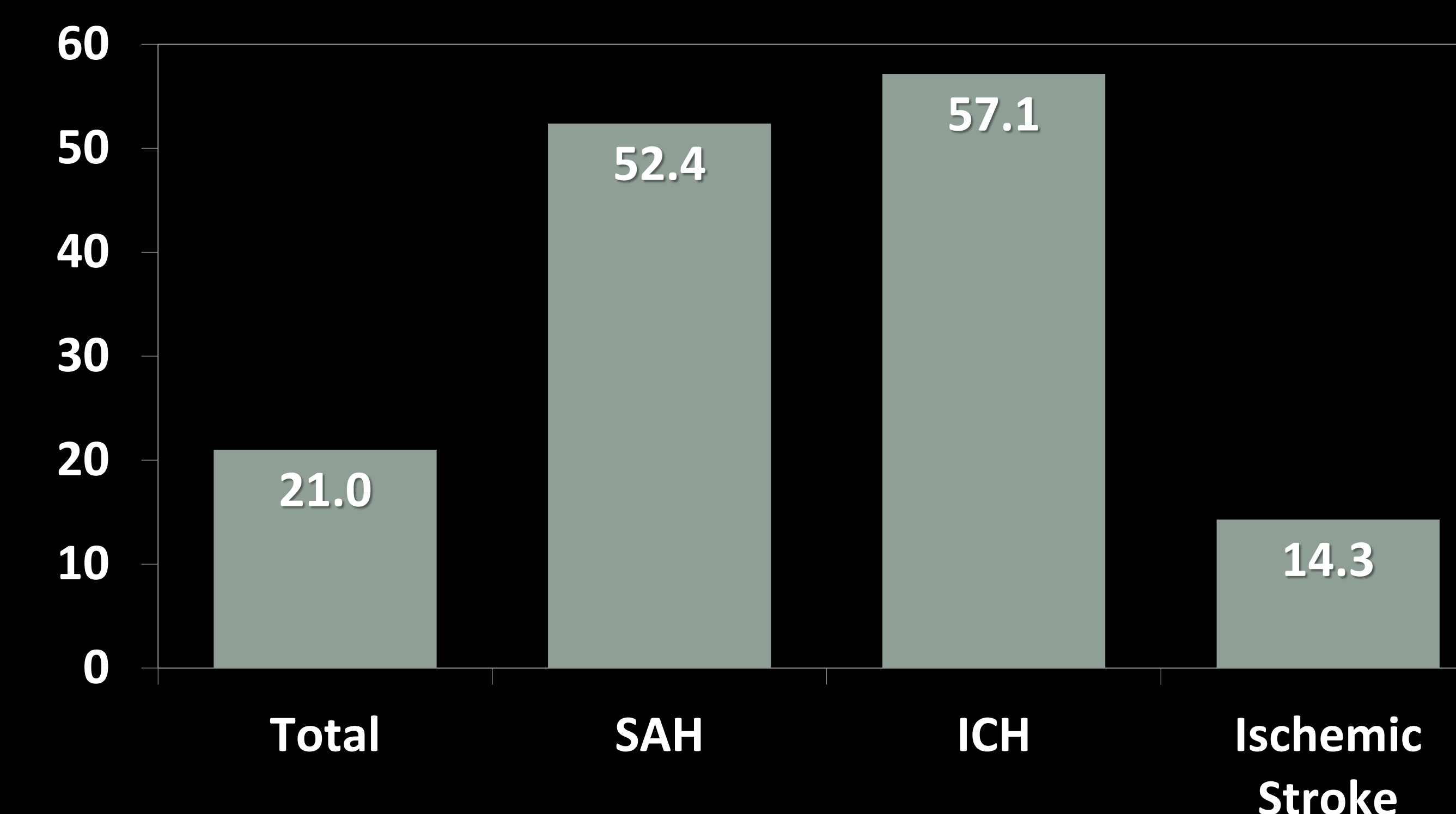
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INTRODUCTION

- The external ventricular drain (EVD) is commonly used in the Neurocritical care unit.
- Placement of an EVD can be complicated by hemorrhage surrounding the catheter insertion tract, which in some cases may prove to be fatal.
- This study was designed to look at the rate of tract hemorrhages after EVD placement



Tract Hemorrhage Rates (%)



METHODS

- Retrospective review of all patients who underwent EVD placement during a three year period using our institutional database.
- Post-insertion computerized tomography (CT) scans of the head were analyzed independently by two physicians to identifying tract hemorrhages.
- Data on primary diagnosis, age, sex, length of ICU stay and mortality were collected and analyzed.

CONCLUSION

- The rate of tract hemorrhages was noted to be 21%.
- Majority of tract hemorrhages were asymptomatic.
- There was no difference in mortality among patients with EVDs who developed tract hemorrhages compared to patients with no tract hemorrhages.

RESULTS

- 115 patients were identified as having had an EVD placed during their hospital course.
- 100 patients were analyzed, of which 43% were male. Mean age was 59.4 years.
- The rate of tract hemorrhages among all patients with EVD images was 21%.

- 50% of patients had a diagnosis of subarachnoid hemorrhage, 45% with intraparenchymal hemorrhage and 16% with ischemic stroke.
- Mortality was 15% among all EVD patients.
- Asymptomatic tract hemorrhages occurred in 19 patients (95.2%) with one patient (4.8%) dying due to the tract hemorrhage itself.
- Among patients with tract hemorrhages mortality was 14.3%.

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