



HAIR DISORDERS

## RISK OF STROKE IN PATIENTS WITH ALOPECIA AREATA: REAL WORLD EVIDENCE FROM A LARGE, URBAN, PATIENT POPULATION

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**Introduction:** Given conflicting prior reports, we sought to investigate whether an association exists for stroke in patients diagnosed with alopecia areata (AA) from a large Midwestern U.S. patient population.

**Objective:** The aim of this study was to explore the relationship between AA and stroke.

**Materials and Methods:** Data were extracted (using ICD-9-10 codes) from a medical record data repository (>6 million patients) for those who saw a dermatologist and had  $\geq 1$  month follow-up (January 2001-October 2018) and a diagnosis of AA (ICD-9-10 codes; 704.01; L63). Outcome of interest was a subsequent diagnosis for stroke (hemorrhagic or ischemic). A control population consisted of dermatology patients without AA. Analyses were adjusted for sex, race, stroke risk factors (including, but not limited to, hypertension, hyperlipidemia, diabetes, atrial fibrillation) and time to follow-up. A stratified analysis by age group (as two cohorts: 18-42 years of age vs 43-89 years of age) was conducted and crude and adjusted odds ratios (aORs) were obtained using logistic regression.

**Results:** Of data from 115,886 dermatology patients, 1,645 had AA. When stratified by age, the older cohort with AA had a significantly decreased frequency of stroke (n=13) (aOR 0.516; 95%CI: 0.297-0.897; p=0.019) compared to the control. Although stroke was also decreased in the younger cohort (n=5), it did not reach significance (aOR 0.98; 95%CI: 0.40-2.39; p=0.971)

**Conclusions:** Notably, this large patient population yielded a significantly decreased risk for stroke in patients over 42 years of age, a group otherwise expected to be at greater risk for stroke. This real world evidence serves to inform practical considerations related to stroke risk in the long-term care for those with alopecia areata.

