Clinical factors associated with progression to gestational trophoblastic neoplasia in patients with gestational trophoblastic disease

Narimatsu AK[1]; Rodrigues SS[1]; Ito JH[1]; Bernardo VL[1]; Souza ELC[1]; Gomes IFS[1]; Ehlert J[1]; Dal Pra AA[1]; Martinello L[1]; Oliveira BLS[1]; Anjos VR[1]; Souza RFF[1]; Wolter IL[1]; Dias LA[1]; Bach JM[1]; Köhler EA[1]; Pickler D[1]; Klosterhoff ME[1]; Sollero MRA[1]; Bartel GC[1]; Stricke K[2]; Fontes MF[2]; Ceccato AL[2]; Reberti A [1,2];Gauza JE[1,2].

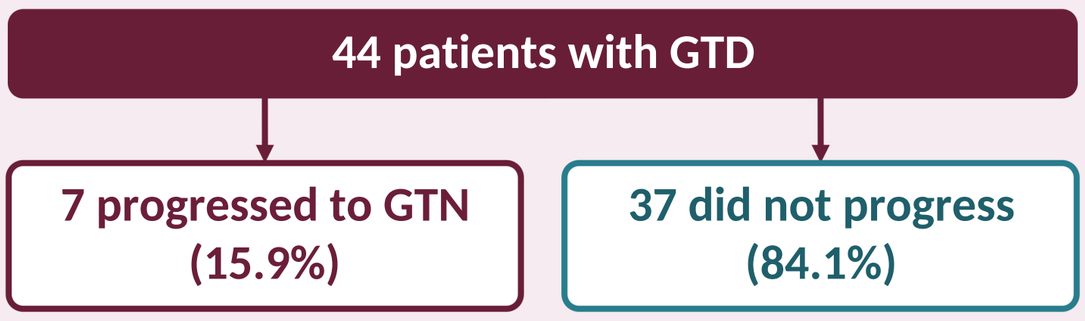
1. Universidade Universidade da Região de Joinville (UNIVILLE), Joinville, SC, Brazil.
2. Maternidade Darcy Vargas (MDV), Joinville, SC, Brazil.

Objectives

Gestational trophoblastic disease (GTD) comprises complete and partial hydatidiform moles and gestational trophoblastic neoplasia (GTN), with β-hCG serving as the central biological marker for follow-up. This study aimed to compare clinical, obstetric, and laboratory characteristics between patients who did and did not progress to GTN.

Methods

- Retrospective observational analytical study based on medical record review
- 44 patients with GTD followed at a referral center (Darcy Vargas Maternity Hospital, Joinville, Brazil), June 2017 to March 2021
- Primary outcome: progression to GTN
- Variables: age, parity, gestational age, initial β-hCG, and number of follow-up visits
- Descriptive analysis using absolute and relative frequencies
- Exempt from ethics review (CNS Resolution No. 510/2016) because secondary institutional data were used



Results

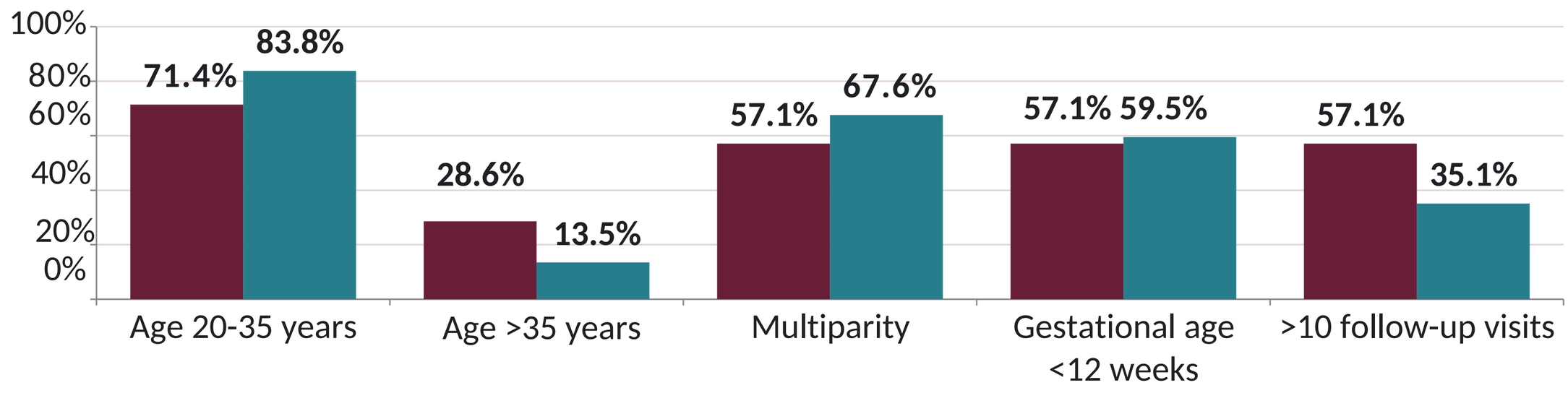
15.9%
of patients (7/44) progressed to GTN

71.4%
of GTN patients (5/7) had initial β-hCG >100,000 mIU/mL

28.6%
progression rate in patients >35 years vs. 13.9% in those aged 20-35 years

57.1%
of GTN patients (4/7) underwent elective hysterectomy; 1 near-miss, no deaths

Characteristics of the GTN and non-GTN groups (% of patients in each group)



Conclusions

- Theprogression rate to GTN (15.9%) is consistent with the 15-20% range reported after complete hydatidiform mole.
- Although most GTN cases occurred in patients aged 20-35 years, the progression rate was proportionally higher among those >35 years (28.6% vs. 13.9%).
- Initial β-hCG >100,000 mIU/mL was the most prominent marker, consistent with the FIGO 2000 risk score. Parity and initial gestational age were similar between groups.
- Given the small number of events (n=7), findings are exploratory and do not establish independent risk factors, reinforcing the importance of β-hCG monitoring and individualized follow-up.

XXIII World Congress on Gestational Trophoblastic Disease | Rio de Janeiro, November 10-13, 2026 | E-Poster ID 95