

# P101 Survey Of Females With Klippel-Trenaunay And Similar Vascular Malformations

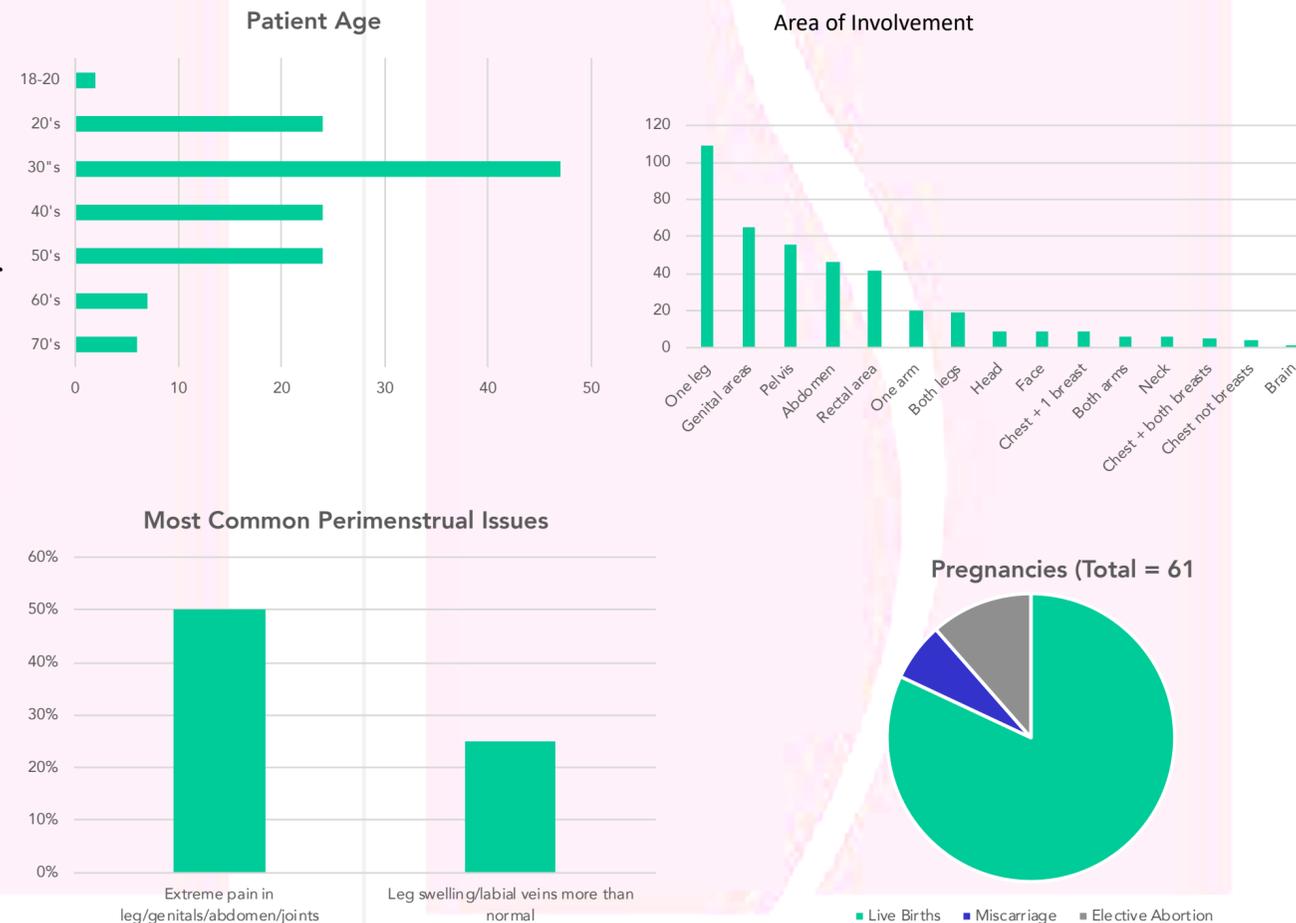
## Focus On Obstetric And Gynecologic Issues

Francine Blei<sup>1</sup>, Mellene Finger<sup>2</sup> and Andrei Rebarber<sup>3</sup>

<sup>1</sup>Lenox Hill Hospital/Northwell Health, New York, New York, USA

<sup>2</sup>Klippel-Trenaunay Support Group, USA

<sup>3</sup>Mt. Sinai Medical Center, New York, New York, USA



## RESULTS:

The survey was active for 9 months, with 137 responses 99 of which included obstetric histories. The age range of respondents was 18-73 years of age (mean 40.97), most with unilateral lower extremity vascular malformations, and 48% with genital involvement. Many had irregular menstrual periods, and exacerbation of vascular malformation-related peri-menstrual symptoms. 47% had or currently use 'standard' estrogen/progesterone birth control pills. Of 23 women who reported reaching menopause, 11 were prescribed hormone replacement therapy.

Over 50% of the respondents had undergone at least one pregnancy (9 women had more than 3 pregnancies), with 77% reporting live births (16% miscarriages, 8 % elective abortions). Nearly half of the pregnant women were prescribed anticoagulants, predominantly low molecular weight heparin. There was 46% rate of Cesarean section. For those women who reported the reason for Cesarean section, 40% were due to vascular anomaly-related concerns (fear of bleeding, pelvic malformation, preventing clots).

## CONCLUSIONS:

There are no consistent obstetric and gynecologic guidelines in the USA for women with complex vascular malformations. A knowledge gap in these disorders must be addressed, so providers can adequately counsel patients, to prevent complications.



## REFERENCES:

Horbach, S. E., et al. (2017). "Complications of pregnancy and labour in women with Klippel-Trenaunay syndrome: a nationwide cross-sectional study." *BJOG* 124(11): 1780-1788.  
Marvin, E. K., et al. (2019). "Venous thromboembolic and bleeding complications among pregnant women with Klippel-Trenaunay syndrome." *J Am Acad Dermatol* 81(6): 1277-1282.

## PURPOSE:

Women with complex vascular malformations (VM) face unique obstetric and gynecologic challenges which are not routinely addressed by medical providers, contributing to incorrect counselling and management. Furthermore, there are few studies and only rare case reports in the literature describing pregnancy and gynecologic issues in women with vascular malformations. Despite the results of Horbach et al, documenting that "women with complex vascular malformations have a significant risk of venous thromboembolic events, severe postpartum haemorrhage, and aggravation of vascular malformation symptoms during pregnancy and in the early postpartum period", we aimed to assess if women in the USA are receiving adequate counselling to prevent these complications. Additionally we aimed to assess peri-menstrual changes in women with vascular malformations. We launched an anonymous survey to acquire data focused on obstetric and gynecologic issues.

## METHODS

We launched comprehensive questionnaire focused on gynecologic issues and obstetric experiences in women with complex vascular anomalies via Survey Monkey hosted on a patient support group website (K-T.org), for 9 months.

- 16% history of pulmonary embolism (not pregnancy related)
- 47% history of significant thrombosis (mostly in VM-affected extremity)

## Contact Information:

support@k-t.org

fblei@northwell.edu