

**RECURRENT  
EARLY  
PREGNANCY  
LOSS**

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A Clinician's View from the front lines



A word cloud is displayed in a black frame. The most prominent word is "miscarriage" in large blue letters. Other significant words include "pregnancy", "prevention", "fertility", "hope", "love", "viability", "depression", "baby", "placenta", "thrombophilia", "missed abortion", "progesterone therapy", "spotting", "high risk pregnancy", "aspirin therapy", "pain", "despair", "embryo", "fetus", "chromosome disorder", "parenthood", "preconception", and "recurrent pregnancy loss".

**THE GOAL**

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The logo for the Star Legacy Foundation, featuring a blue star with a white outline and the text "STAR LEGACY FOUNDATION" below it, is centered within a white square. A large red prohibition sign (a circle with a diagonal slash) is overlaid on the logo, indicating that the goal is to prevent or eliminate the need for the foundation's services.

Figure 1

## THE OBJECTIVES

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- The attendee should be able to:
  - Define pregnancy recurrent loss
  - Identify “at risk” patients when providing procreative care
  - Listen and understand the timing of appropriate care as well as the various treatment options available

## THE PROBLEM

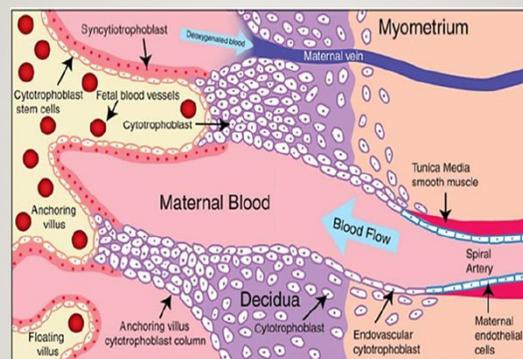
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- Out of date concepts
- Concept confusion
- Costs
  - Emotional and Financial
- Disconnection
- Discounting

## THROMBOPHILIA

- Definition
  - A tendency to form blood clots
- Common
- Likely causes
  - Factor V Leiden
  - Prothrombin mutation
  - Antiphospholipid Syndromes
  - Autoimmune conditions
  - MTHFR

## ABNORMAL PLACENTATION



## ENDOTHELIAL DAMAGE

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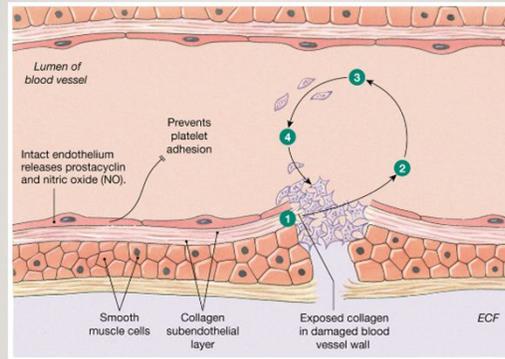


Figure 3

## THE APPROACH

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- History and Physical
- Lab work
- Planning
- Supportive Care

## SUPPORTIVE CARE

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## CASE HISTORY #1

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- 35 yo G7P3043
- No significant past medical history
  - Other than a personal history of Lipoprotein Level A
- Strong family history of cardiovascular disease
  - Father age 70 w/HTN who was subsequently encouraged to be tested and was ultimately diagnosed with Lipoprotein Level A based on the knowledge of her diagnosis.
- Treatment Regimen
  - (2) 81mg Aspirins QD
- Outcome
  - 3 full-term deliveries w/one miscarriage while not on the regimen

## CASE HISTORY # 2

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- 39 yo G6P1
- No significant medical history
  - Other than a personal history of MTHFR homozygous for C677t
- Family History
  - She has a brother, father and paternal grandfather w/history of heart attack at ages 46-48.
- Treatment Regimen
  - Lovenox
  - BPP
- Outcome
  - Successful full-term normal delivery and she is currently pregnant on the same regimen with a spontaneous pregnancy

## CASE HISTORY # 3

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- 39 yo G12 P3092
- Medical history significant for recurrent pregnancy loss and PTSD
  - She has had pregnancy losses from 6 weeks to an IUPD at 37 weeks
  - She had one elective 20 week termination for severe IUGR secondary to suspected, but not confirmed Dandy-Walker Syndrome
  - She was also found to be positive for MTHFR A1298c mutation
- Treatment
  - Aspirin, Lovenox + Progesterone
- Outcome
  - Pregnancy with normal growth however, that pregnancy did end in fetal demise at 10 weeks due to trisomy 15

## PARTING THOUGHTS

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- Do give supportive care
- Do team with specialist
- Do initiate early care
- Do entertain multiple causes and treatments
- Do educate

## PARTING THOUGHTS CONTINUED

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- Don't gaslight
- Don't refer to infertility specialist for RPL
- Don't equate thrombophilia with disease
- Don't ignore special circumstances

## THE FUTURE

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- “The pathophysiologic processes involved in complicated pregnancies echo those of CAD and stroke: inflammation, altered angiogenesis, vasculopathy, thrombosis, and insulin resistance.”
- “All of these data underscore the importance of identifying at-risk women based upon reproductive history.”
- “Pregnancy complications give us a glimpse of this awful disease trajectory at a time when women are completely asymptomatic and we could intervene and perhaps change outcomes with targeted therapy when it might be expected to work better.”

– Dr. Carole A. Warnes

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# THANK YOU

## BIBLIOGRAPHY

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- Figure 1
  - <https://starlegacyfoundation.org/>
- Figure 2
  - Everett et al, Placenta, 33:893-901, 2012 [21]
- Figure 3
  - National Hemophilia Foundation, web site at [www.hemophilia.org](http://www.hemophilia.org)