


Bad Obstetric History and Fetal loss Due to Thrombophilia

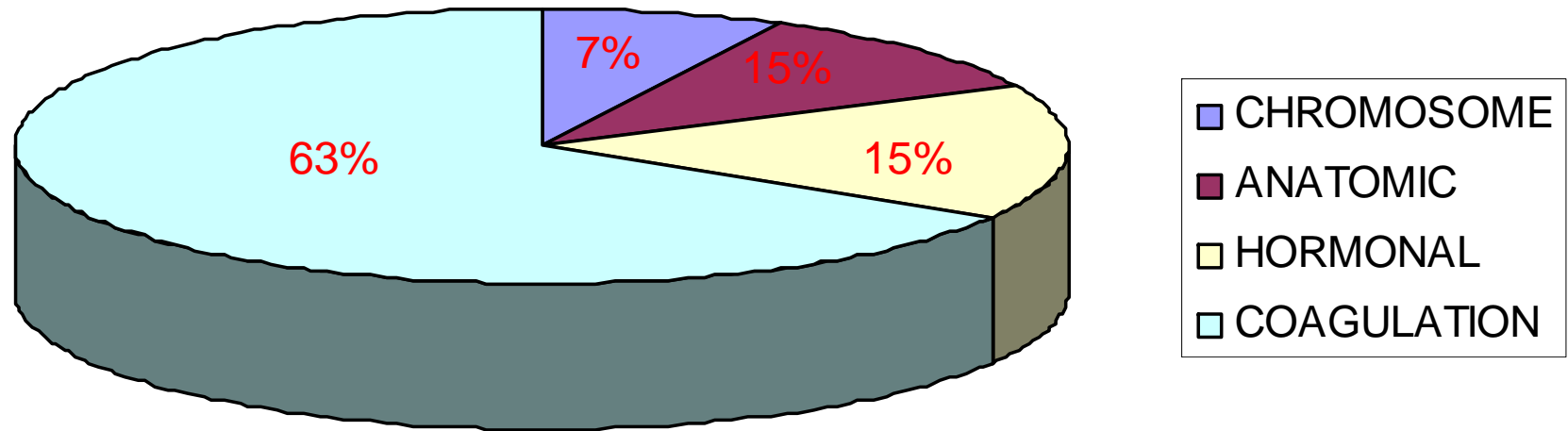
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Introduction:

- In their lifetimes, women are likely to face situations associated with an increased risk of venous thromboembolism (VTE), be it through hormonal therapy or pregnancy.
- Several pregnancy complications, including recurrent miscarriage, intrauterine fetal growth retardation, intrauterine death and possibly abortion and eclampsia, are reported to be more common in women with thrombophilic defects.
- Women with thrombophilia have a 2-3 fold increased risk of late fetal loss, this risk may be significantly greater in women with multiple thrombophilic defects.
- Few small studies were shown compared to past pregnancies there was a higher success rate (84% vs 20%) in treated women.

DEFECTS CAUSING RECURRENT MISCARRIAGE



Mechanisms of Recurrent Miscarriage Due to Blood Coagulation Protein/Platelet Defects

Bleeding Disorders

- Factor XIII Deficiency
- Von Willebrand Disease
- Factor X Deficiency
- Factor VII Deficiency
- Factor V Deficiency
- Factor II Deficiency
- Hypofibrinogenemia
- Dysfibrinogenemia
- Hemophilia A Carrier

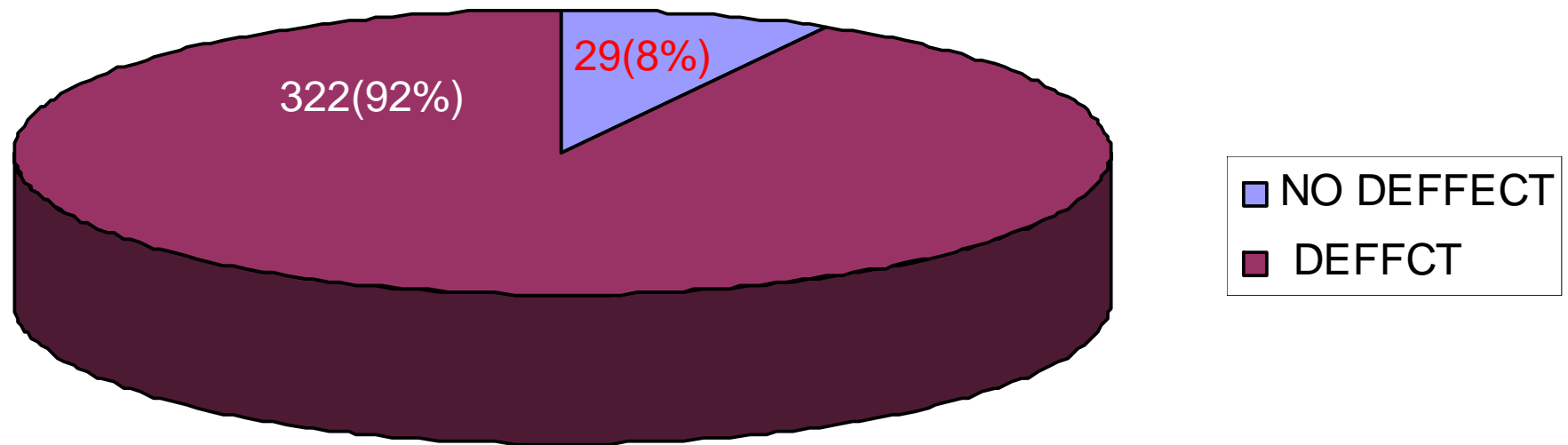
Thrombotic Disorders

- Antiphospholipid Syndrome
- Sticky Platelet Syndrome
- MTHFR Mutations
- Hyperhomocysteinemia
- PAI – 1 Elevation/Polymorphisms
- Protein S Deficiency
- Factor V Leiden
- Prothrombin G20210A
- Protein c Deficiency
- Antithrombin Deficiency
- Heparin – Cofactor II Deficiency
- TPA Deficiency
- Elevated Lipoprotein (a)
- Immune Vasculitis

DALLAS THROMBOSIS- HEMOSTASIS CLINICAL CENTER EXPERIENCE

- Three - hundred fifty-one women referred for thrombosis and hemostasis evaluation and management during pregnancy after suffering recurrent miscarriages.
- All patients were referred after anatomic ,hormonal or chromosomal defects had been ruled out.
- The mean patient age at referral was 34 years and the mean number of miscarriages was 2.9(2-9).
- These patients were assessed over a three year period.

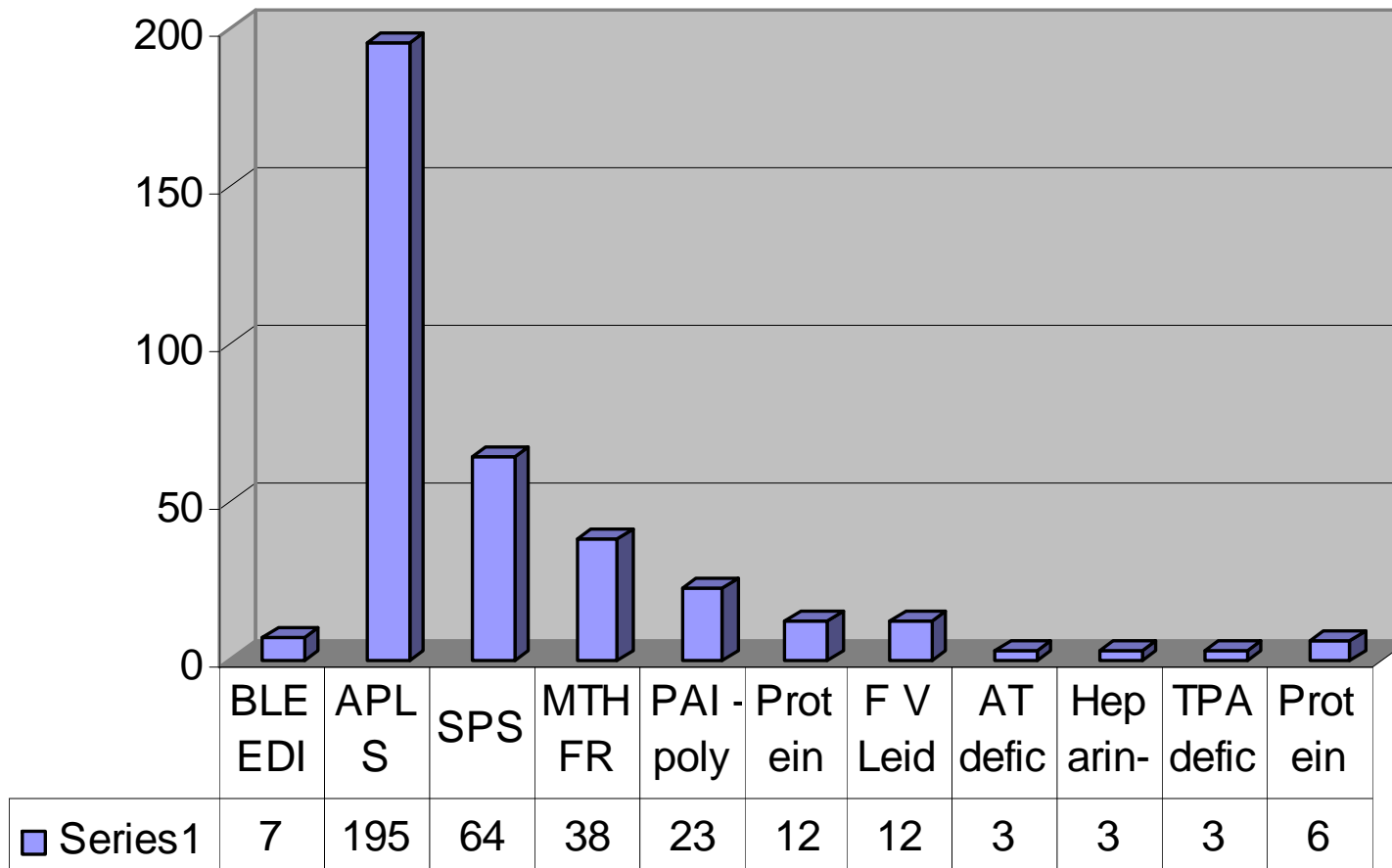
DALLAS THROMBOSIS HEMOSTASIS CLINICAL CENTER EXPERIENCE



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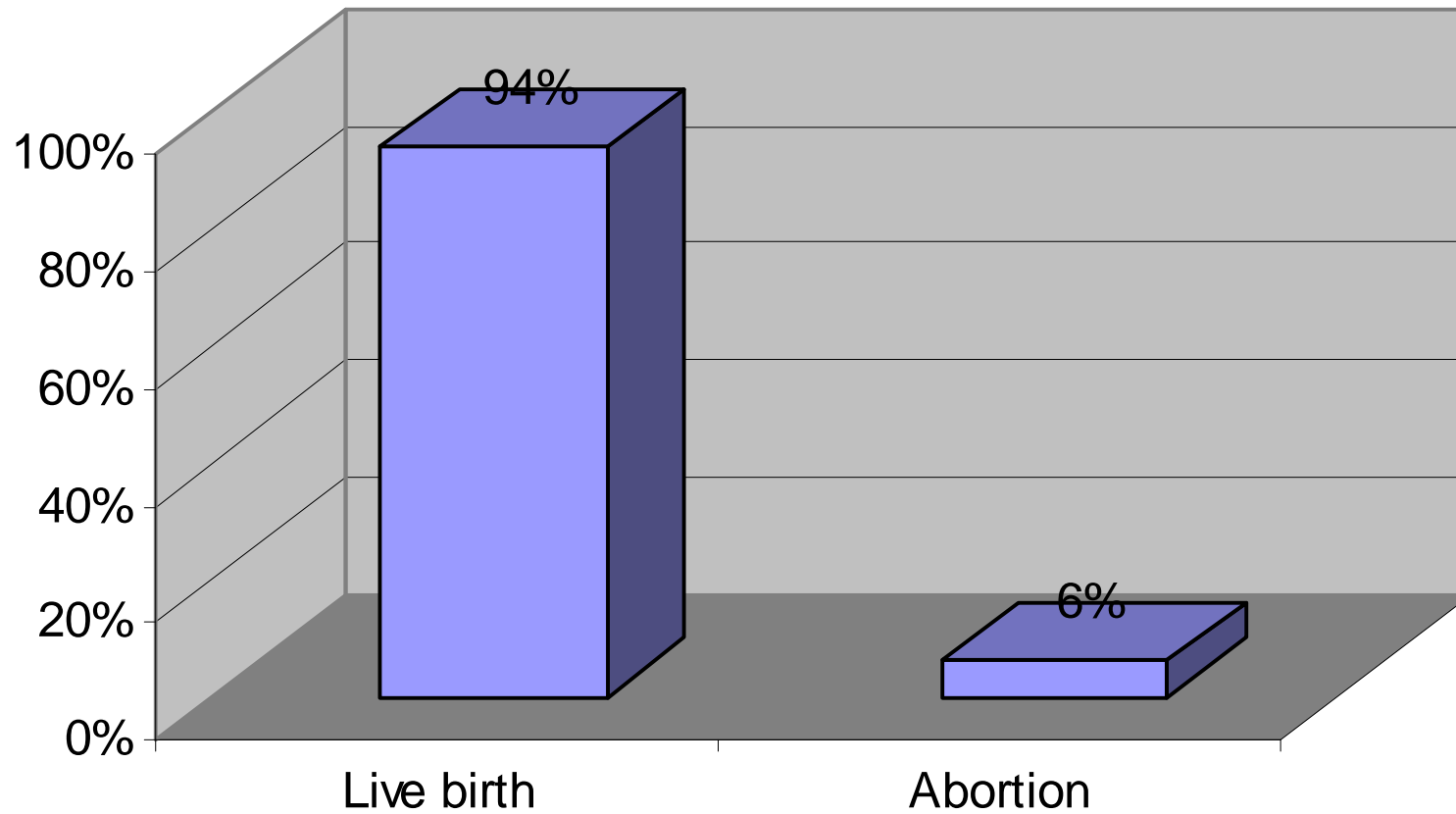
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DALLAS THROMBOSIS HEMOSTASIS CLINICAL CENTER EXPERIENCE



DALLAS THROMBOSIS HEMOSTASIS CLINICAL CENTER EXPERIENCE

Result of Treatment

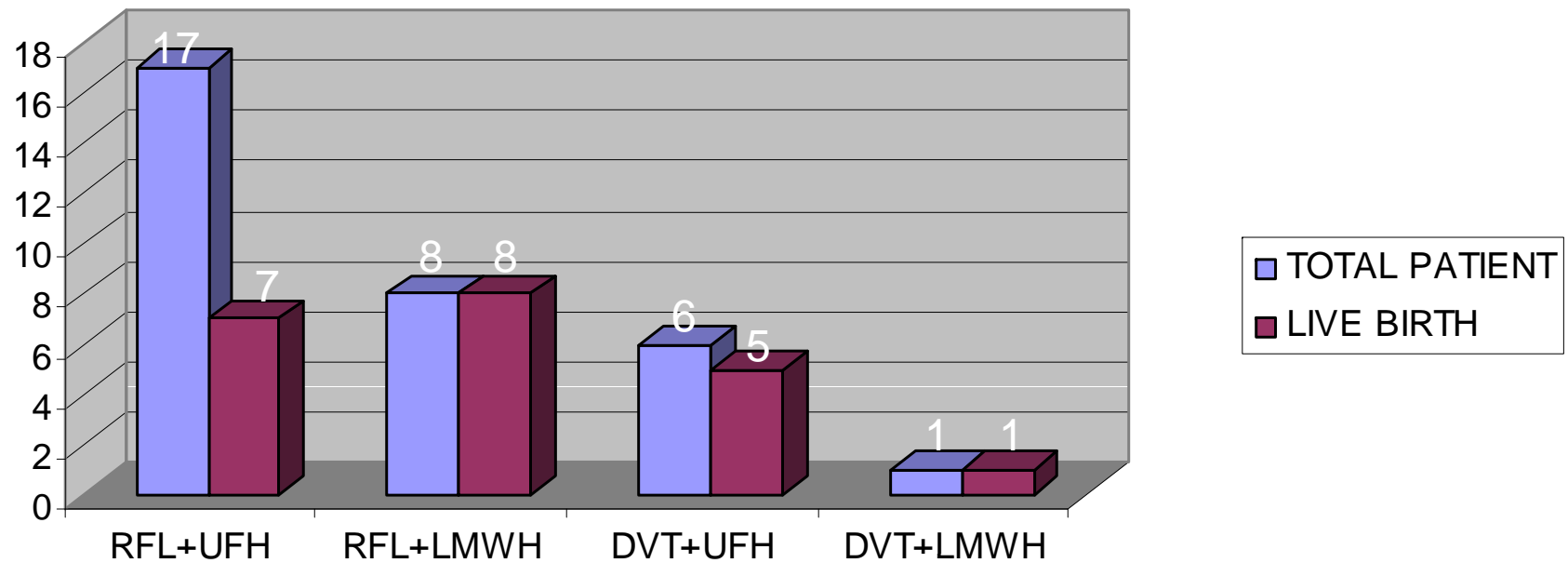


Mumbai Institute of Immunohematology experiences

- Analyzed 32 consecutive pregnant women (mean age=24 years) with either DVT associated with pregnancy or a history of recurrent fetal loss for evaluation of thrombophilia and subsequent management during pregnancy.
- All the women had a thorough investigation (ie, cytogenetic, hormonal, anatomical, and infective causes for fetal loss) and were negative for above-mentioned causes.

Mumbai Institute of Immunohematology experiences (Kanjaksha Ghosh,etal)

Live birth rates achieved by LMWH and UFH in cases with recurrent fetal loss(RFL) and deep vein thrombosis (DVT)I



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REFERRED

SELF-REFERRED

OBSTETRICIAN/REPRODUCTIVE MEDICINE

ANATOMIC
WORK-UP

ENDOCRINE
WORK-UP

GENETIC/CHROMOSOME
WORK-UP

APL-S
WORK-UP

COAGULATION/IMMUNOLOGIC
WORK-UP

← NEGATIVE

ETIOLOGICAL DIAGNOSIS

TREATMENT PROGRAM DESIGNED



Tehran University Thrombosis- Hemostasis Research Center Experiences

- Analyzed 47 consecutive women (mean age=30.6 years) with either bad obstetric history or a history of recurrent fetal loss in themselves or her family for evaluation of thrombophilia and subsequent management during pregnancy.

- Anticoagulation Regimen:

All patients with thrombophilia were treated immediate post-conception with ASA at 80 mg/day with addition of LMWH (Dalteparin) 5,000 IU/day subcutaneously until delivery, the anticoagulation was continued 6 weeks in postpartum.

The patients with MTHFR (homocysteinemia) were also treated with folate at 5 mg/day + pyridoxine 50 mg/day+B12/monthly.

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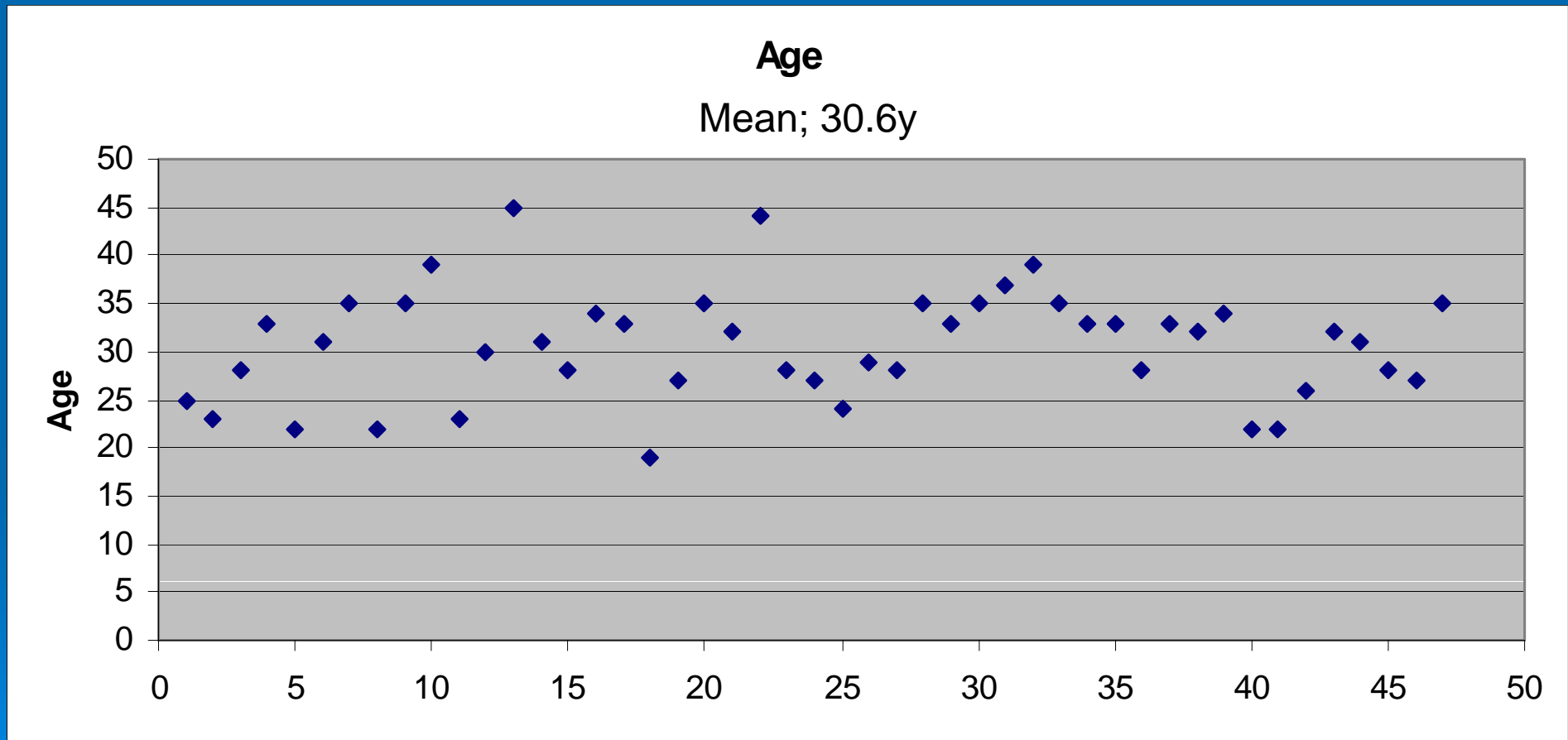
➤ Laboratory Monitoring:

No anti-Xa or anti-IIa activity was studied in the case of women treated with LMWH.

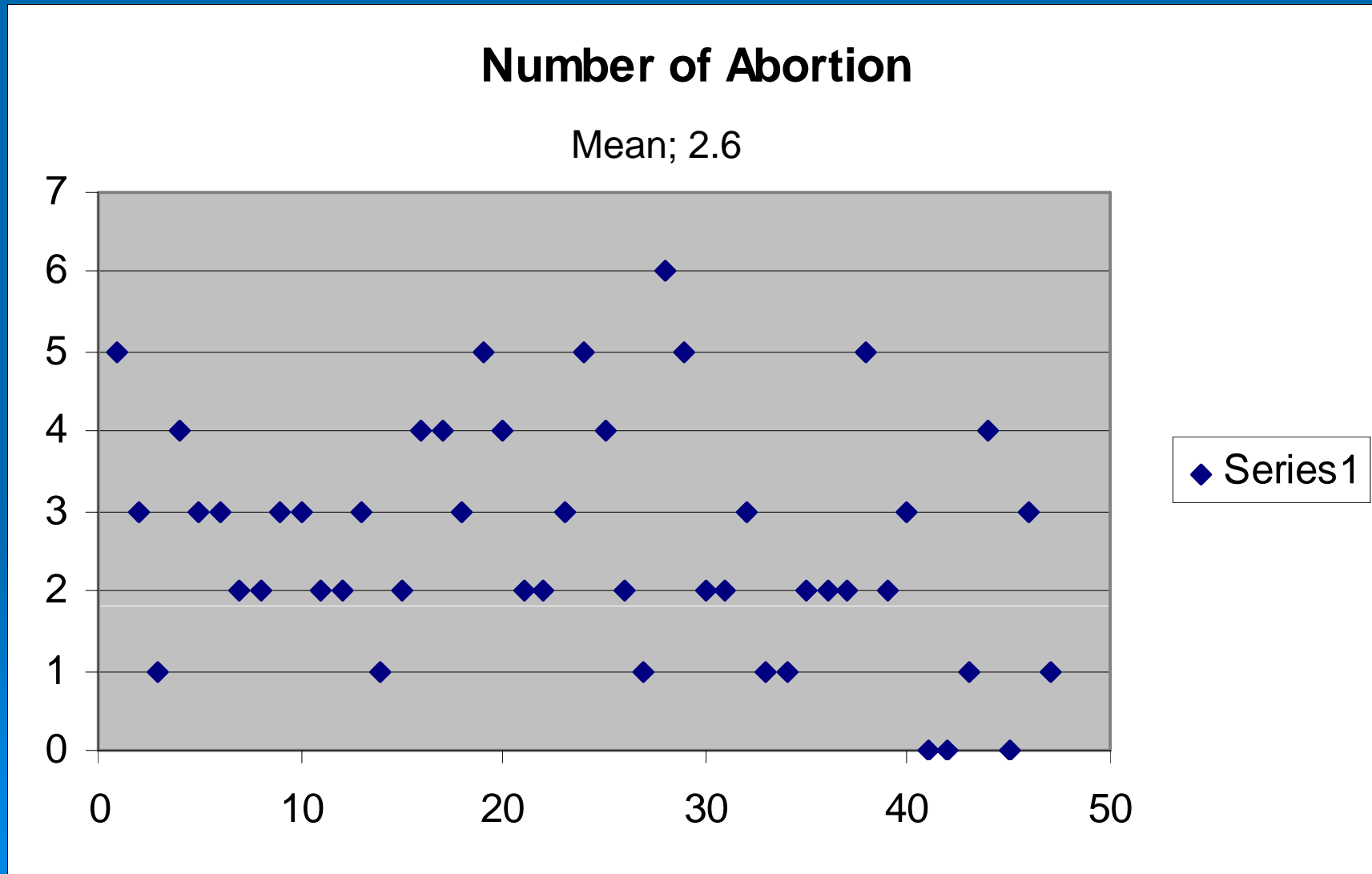
During each visit, a detailed history of bleeding was taken from each patient.

The patient had routine blood count during follow-up ,with special reference to thrombocytopenia.

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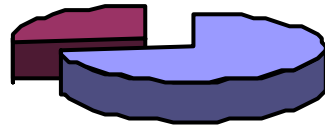
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Frequency of Coagulation Defect

12, 26%

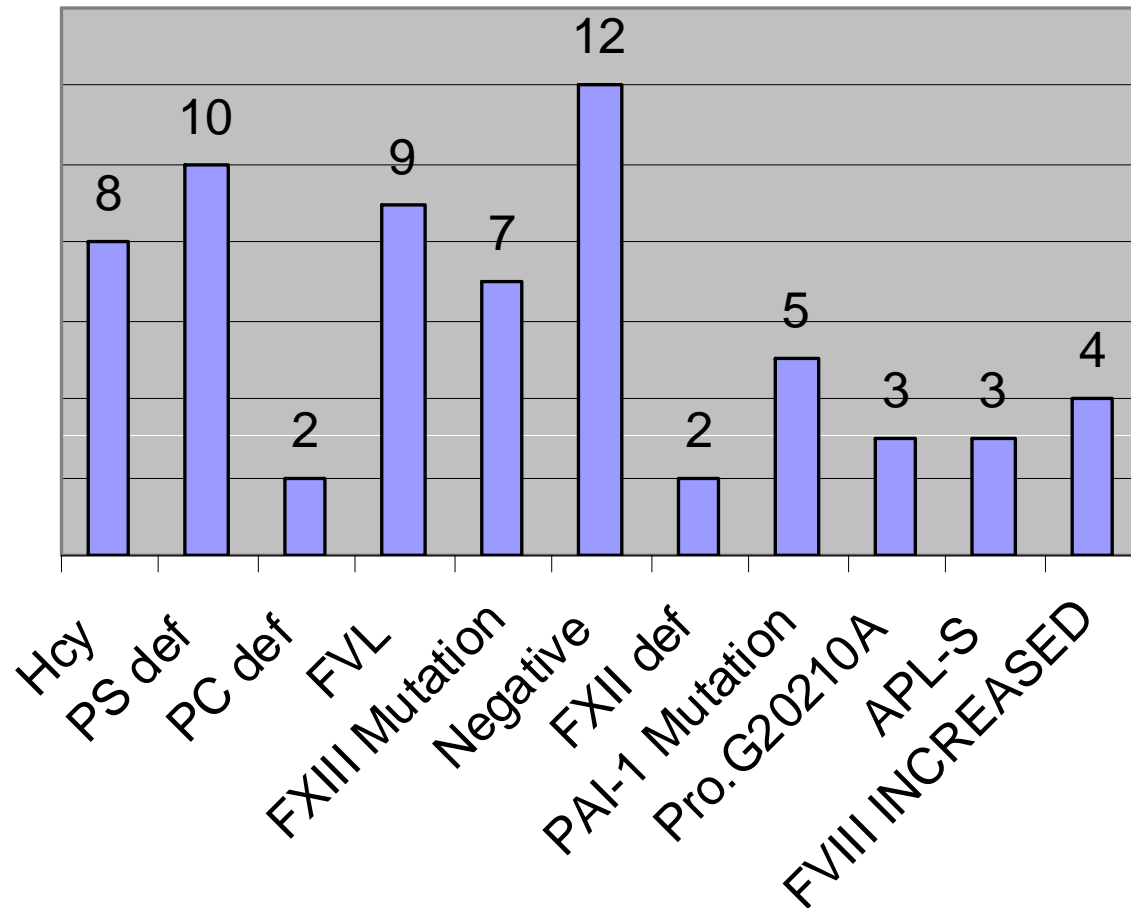


35, 74%

■ Coagulation
defect
■ Negative

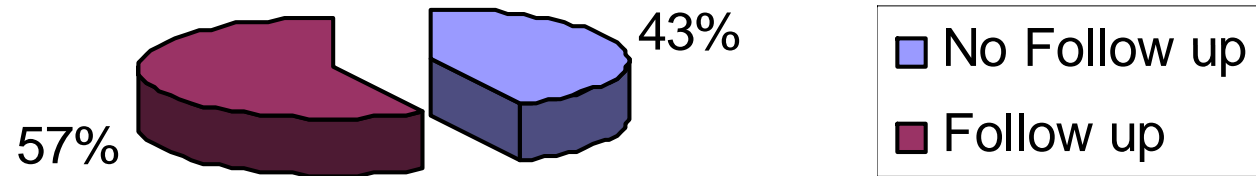
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Etiology of Coagulation Defects



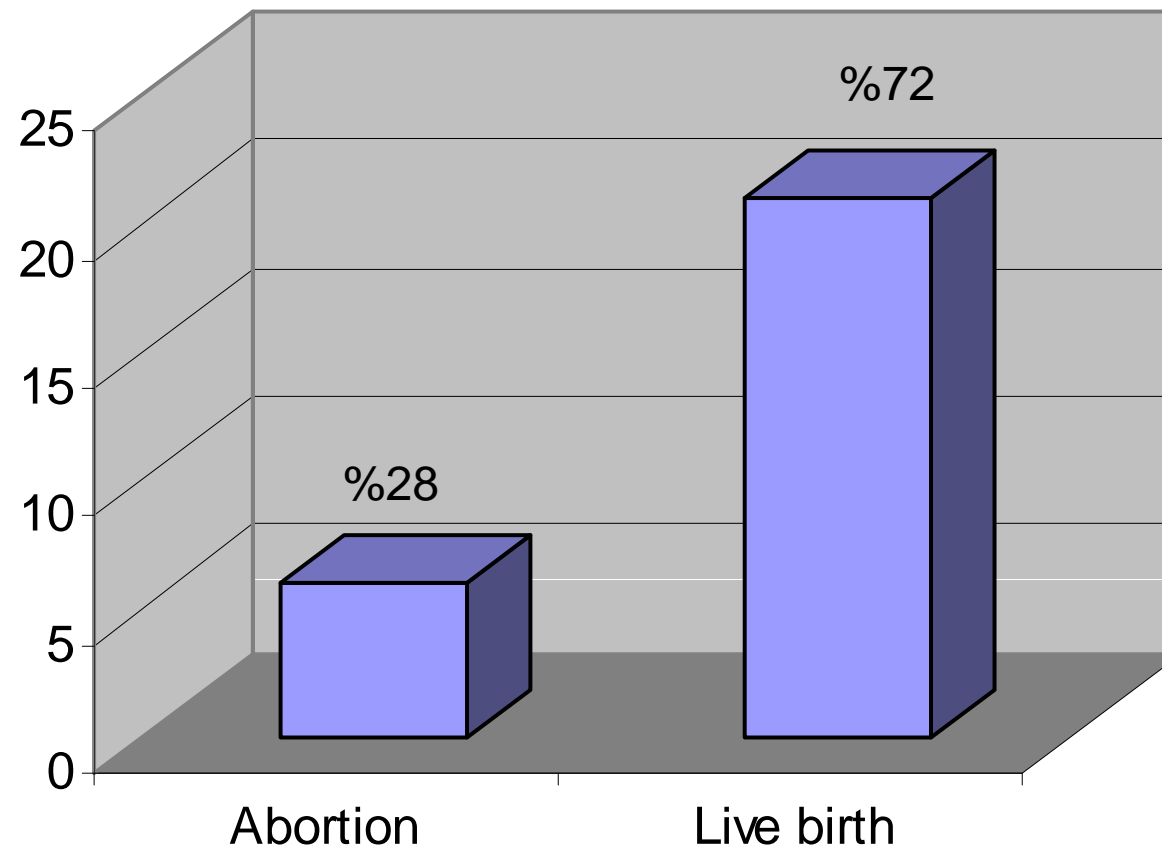
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Follow up Status



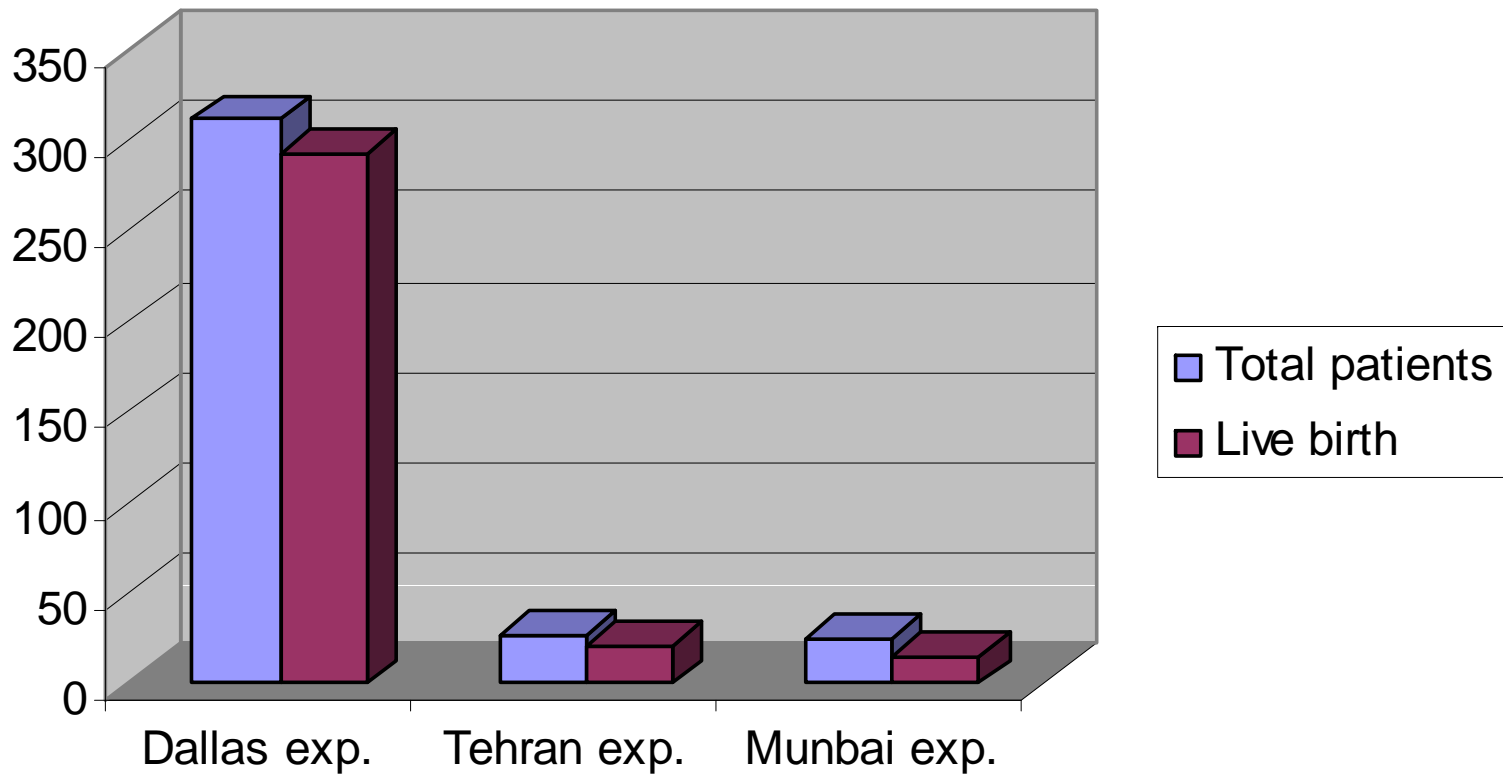
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Result of Treatment



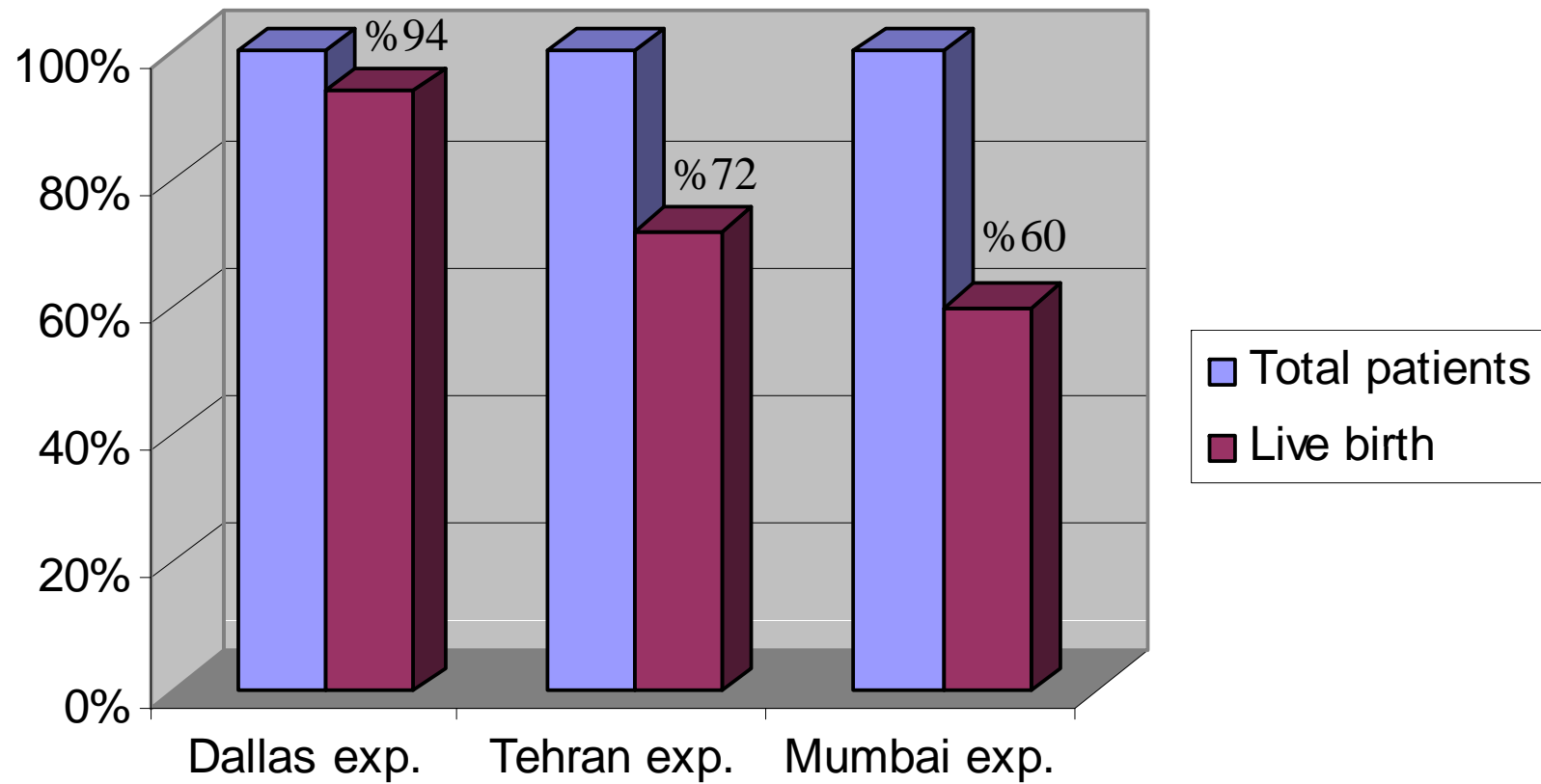
Conclusion

Comparison of results



Conclusion

Comparison of results



Conclusion

- In our experience, thrombophilia is a common cause of recurrent miscarriage and all patients with no anatomical, hormonal or chromosomal defect should be evaluated for thrombophilia or bleeding disorder.
- The success rate of normal term delivery in these 27 patients was %72 using ASA + Daltaparin.
- In addition, side effects of therapy were minimal.