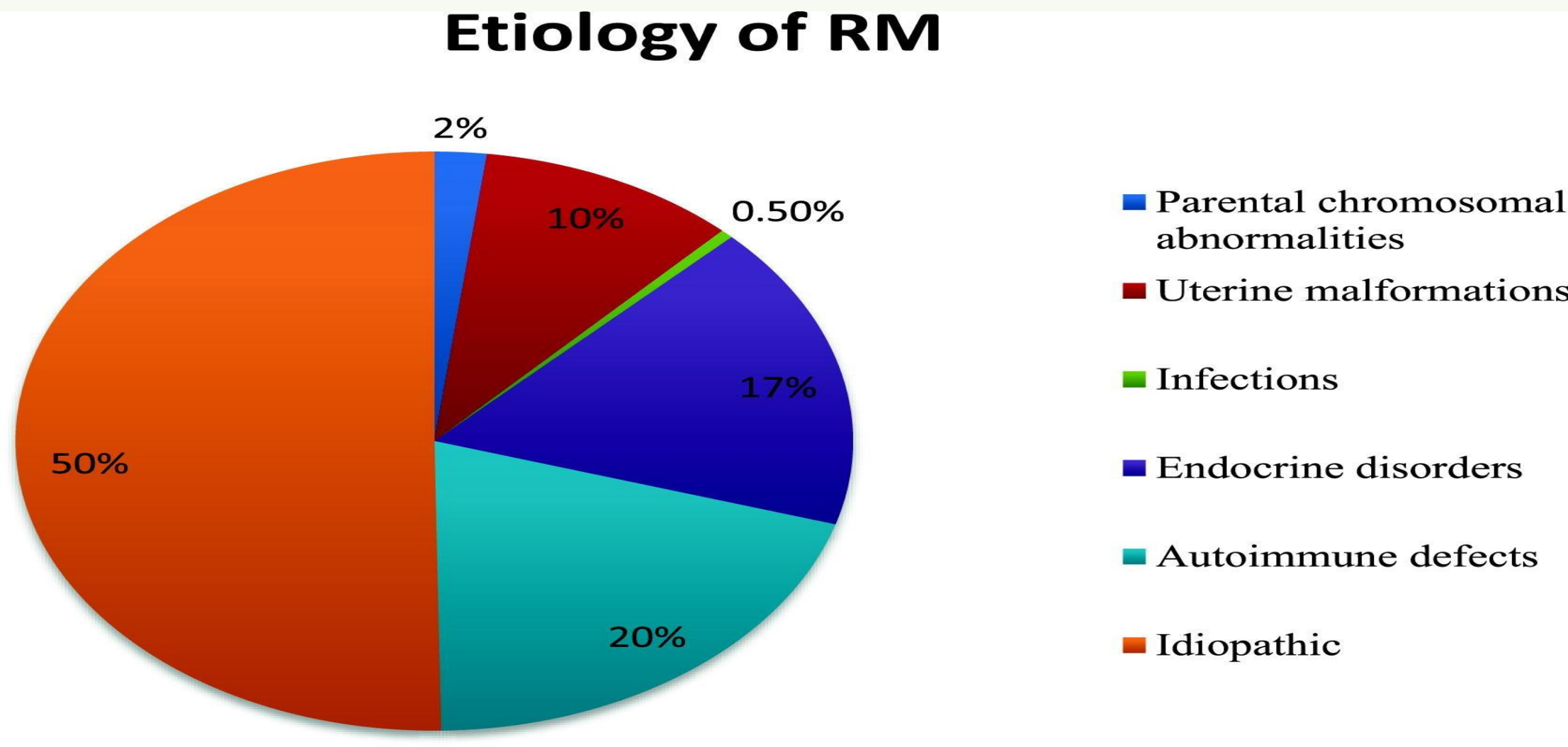




Title: Prednisolone and alternate-day enoxaparin in unexplained recurrent pregnancy loss.
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Introduction:

- Recurrent miscarriage (RM), defined as the loss of three or more consecutive pregnancies , confirmed by Ultra-sonography or Histopathological examination, affects 1% of couples trying to conceive. It has been estimated that 1–2% of second-trimester pregnancies miscarry before 24 weeks of gestation.

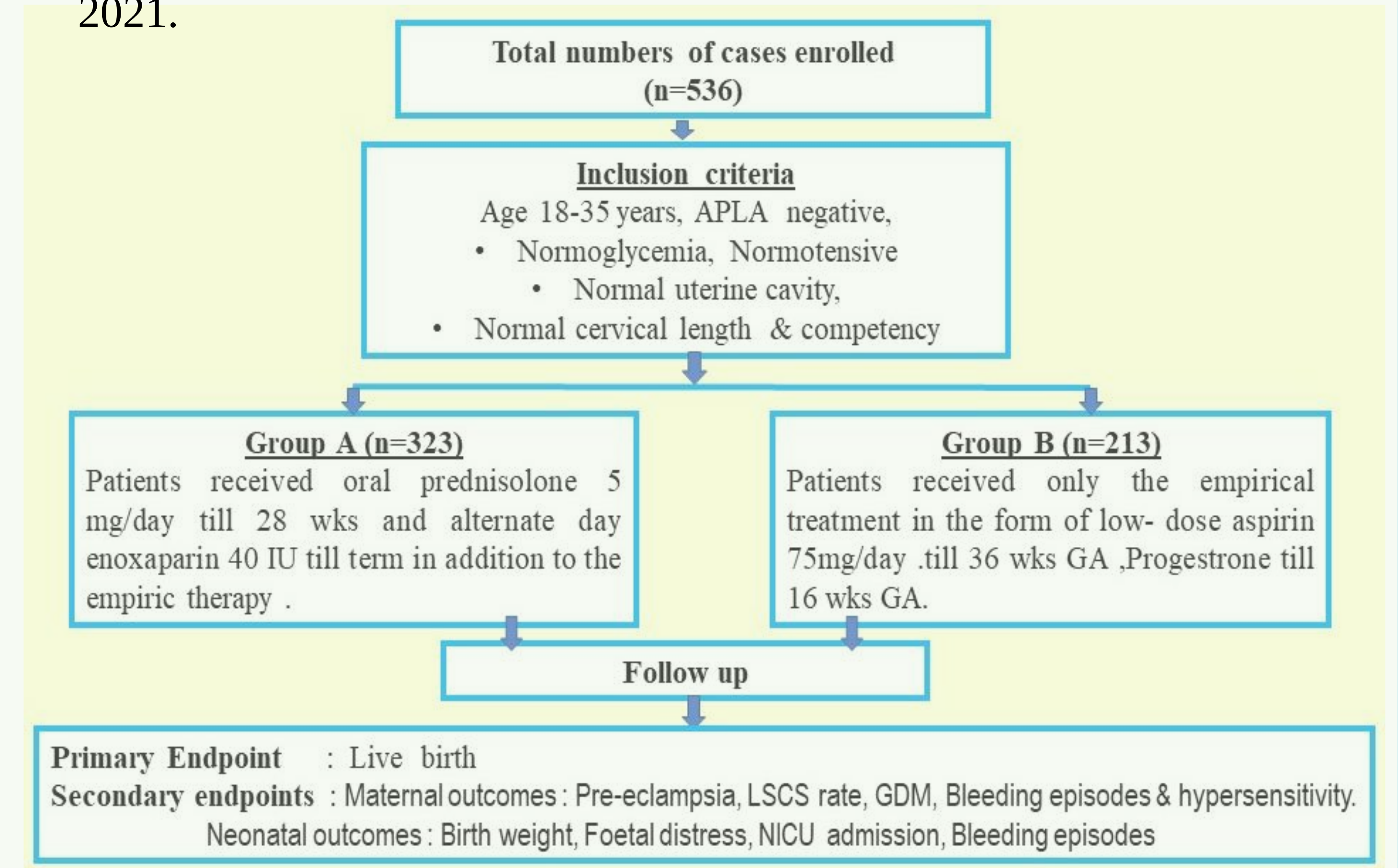


- Up until now, therapy has been empirical and not evidence based, resulting in a poor understanding of the precise etiology of unexplained RM. Treatments includes Aspirin, Heparin, progesterone, steroids, leukocyte immunization, Intralipid and IVIG
- Heparin and aspirin have been recommended as a standard empiric treatment for cases of RM by the American College of Obstetrics and Gynecology and the Royal College of Obstetrics and Gynecology protocols,
- Prednisolone has been reported to improve in vitro fertilization treatment outcome and to reduce the rate of miscarriage due to various reproductive immunological problems by increasing the T-regulatory cells, which in turn regulate the peripheral NK cells and their homing into the decidua.

Aim and Objectives:

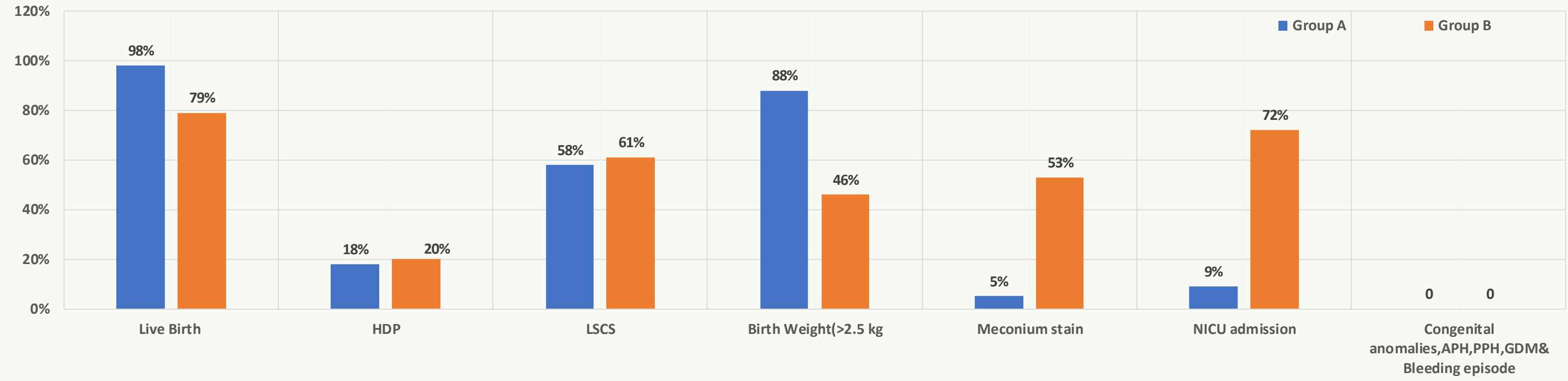
The aim of the study was to investigate whether the use of alternate day low molecular weight heparin (LMWH) and low dose Prednisolone improve live birth rates in patients with unexplained recurrent miscarriages (URM)

Materials and methods: This randomized double-blind placebo controlled clinical trial was conducted at LIGG hospital, maternity unit Odisha, India and patients involved who experienced unexplained recurrent miscarriage(which was defined as ≥3 previous miscarriages at <20 weeks, gestation) between January 2017 and May 2021.



Results : (Parameters ↓)	Group A (n=323)	Group B (n=213)	P value
Live Birth	98%	79%	<0.05
HDP	18%	20%	NS
LSCS	58%	61%	NS
Birth weight (>= 2.5Kg)	88%	46%	<0.05%
Meconium Stain	5%	53%	<0.05%
NICU Admission	9%	72%	<0.05%
Congenital anomalies, GDM, Bleeding episode, Allergy	NIL	NIL	NS

Results: (Group A Group B)



Study result found by Gomaa et al.2014

	Group I (Prednisolone 5 mg/day and empiric therapy)	Group II (Low- dose aspirin 81 mg/day and unfractionated heparin 5,000 IU subcutaneously injected/12 h)	RR (95% CI)
Successful outcome	70.3%)	9.2%	7.63 (3.7-15.7)
Miscarriage	29.7%	90.8%	

Study result found by Tempfer et al. 2006

	Group I (Prednisolone, Aspirin)	Group II (Control)	P value
Live Birth	77%	35%	0.04
Miscarriage	1st Trimester 19%	63%	
	2nd Trimester 0%	2%	
Premature birth	4%	6%	

Conclusion:

Low dose prednisolone (5mg) with alternate day enoxaparin 40 IU in addition to the empiric therapy resulted in improved live-birth rate in patient with 3 or more consecutive unexplained recurrent pregnancy loss which is more economical and convenient to the patient.

Reference :

- Gomaa ET AL. Combined oral prednisolone and heparin versus heparin: the effect on peripheral NK cells and clinical outcome in patients with unexplained recurrent miscarriage. A double-blind placebo randomized controlled trial. Arch Gynecol Obstet. 2014 Oct;290(4):757-62.
- Tempfer ET AL combination treatment of prednisone, aspirin, folate, and progesterone in women with idiopathic recurrent miscarriage: a matched-pair study. Fertil Steril. 2006 Jul;86(1):145-8