

Effect of obesity on ART

Clinical outcomes of ART:

- Obesity \propto poor ART outcomes
 - live birth rate

Perinatal outcome:

- see "obesity @ pregnancy"

Mechanism:

(1) Energy homeostasis:

*	++ Leptin	-- Adiponectin	(adipose tissue)
	++ Insulin GLP 1	-- Ghrelin	(Gut)

acting peripherally on ovary:

↳ see pathogenesis of PCO

acting centrally on hypothalamus

↳ satiety response

-- Neuropeptide Y

→ ++ GnRH pulses

Leptin

→ ++ GnRH pulses

سبب الدكس

Leptin /

leptin receptor resistance → # lack directly response



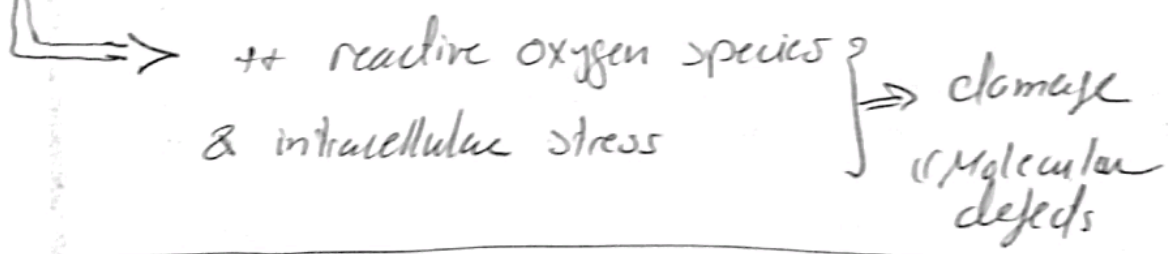
② Inflammation:

Obesity = chronic inflammatory status

↳ Systemic inflammatory response

+

accumulation of FFAs in tissues



Obesity ⇒ lower implantation rate

+ Normal oocyte and embryo quality and no.

Result

Obesity either:

- molecular or genomic defects in oocyte or embryo

or

- effect on endometrial receptivity

III of obese women:

- * Evaluation : - degree
- type
- co morbidities

* 1st line : . diet : 600 Kcal less than requirement

. exercise :

* 2nd line : antiobesity medications :

⊆ No evidence increased major risk → * stopped when to discontinue? once pregnancy achieved

+ Modalities :

- Antiabsorbative :

Orlistat :

↳ Mechanism of action : inhibit pancreatic lipase

↳ dose : 120 mg

↳ side effects :

- flatulence, fecal urgency

- Malabsorption + vit def.

Standard used for < 12 weeks

- Insulin sensitizing agents

↳ Metformin

+ Bariatric surgery

↳ see before