

# A proposal based on concepts of human genetics and in the light of Mendel's laws was setting

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**Abstract:** A proposal based on the concepts of the human genetics in the light of the Mendel's laws are including the sexual characteristics of the male and female. The female characteristics is (X) to male masculinity(Y-Y) to form(Y-X-Y) in sperm and the male characteristics is(Y) to female feminility (X-X) to form(X-Y-X) in egg. After fertilization process (sperm fuses with the egg) to form embryo(fetus) setting in the mother uterus, the growth will begins.

**Keywords:** Mendel's laws, Sex hormone, zygote division.

## 1. INTRODUCTION

### 1.1-Mendel's laws.

Law of the inheritance is made of three laws, law of segregation, law of independent assortment and law of dominance<sup>(1)</sup>.

### 1.2-Theory of inheritance.

The chromosomal theory of inheritance first formulated by the American Walton in 1902.The initial union only two cells, egg and sperm, If Mendel's model were correct, then these two gamete must make equal heredity contribution .Sperm however, continue little cytoplasm suggesting that the heredity material must reside within the nuclei of the gamete of each pair of the homologous chromosomes gamete farther more, While diploid individual have two copies consisting with the Mendel's model, in which diploid individual have two copies of each heritage gene and gamete have one<sup>(2)</sup>.

### 1.3- Heredity

Heredity is the transmission of genetic characteristics from parents to off spring and is often referred total genetic<sup>(3)</sup>.

### 1 4-The fertilized egg

The fertilized egg divides repeatedly at its travels down the following tube into down uterus, the pump is part of the fertilized egg that eventually becomes an embryo. It is considered an embryo starting from about 10 weeks, of pregnancy. After few weeks the umbilical cord grown from other side of the city. Blood moves from pump through the umbilical cord into the placenta<sup>(4)</sup>.

## 2. HORMONES

### 2.1-Steroid Hormones.

The synthesis of the androgen and estrogens from pregnenolone. Estrogen and progesterone are steroid hormones that play a pivotal role in the regulated the development and function of uterus. These hormone act by regulating the transcription of specific genes in the uterus<sup>(5)</sup>.

### 2.2- Hormone function.

The hormone function control production of sex hormones (estrogen in woman and testerone in men) and production of eggs in the women's and sperms in men<sup>(6)</sup>.

Estrogen is steroid hormone associated with the female reproductive organs and responsible for developing female sexual characteristics. Progesterone is primarily known as the pregnancy hormone in female and most of its functions pregnancy specifically by preparing the endometrium decreasing myometrial contraction for implantation promoting gestation, and inhibition of location during pregnancy<sup>(7)</sup>

Estrogen female sexual characteristics. In males derive from circulating androgens The key step in estrogen biosynthesis. Testosterone in men 280-1100 ng/dl and in women 15-17ng/dl<sup>(8)</sup>.

Progesterone found in males, but men rely on alleged" female hormone" to preserve masculinity<sup>(9)</sup>.

**2.3-Sex hormones.**

Hormones whose production is controlled by neuroendocrine system. Both males and females produce the different sex hormones-estrogen, progesterone, testosterone but with vary in concentrations. These hormones are critical in development of secondary sexual characteristics and during pregnancy but also play a role in modifying immune responses<sup>(10)</sup>.

**3. RESULTS**

Hypothesis and facts:-

1. Extra interpretation are introduce, that the male carries female characteristic (X) and the female carries male characteristic (Y), so that they will becomes as male (Y-X-Y) and female (X-Y-X).
2. The union(fuses) sperm with egg to form zygote depending on physiological, physical health of parents as well as psychology of both male and female.
3. The sex of the baby was cannot be determined until 14 weeks after fertilization.
4. The zygote division controls by more than one factors and ways (physiological and physical).
5. The zygote undergoes several divisions, the most important is those leads to emergence of a male or female fetus. (e.q2)

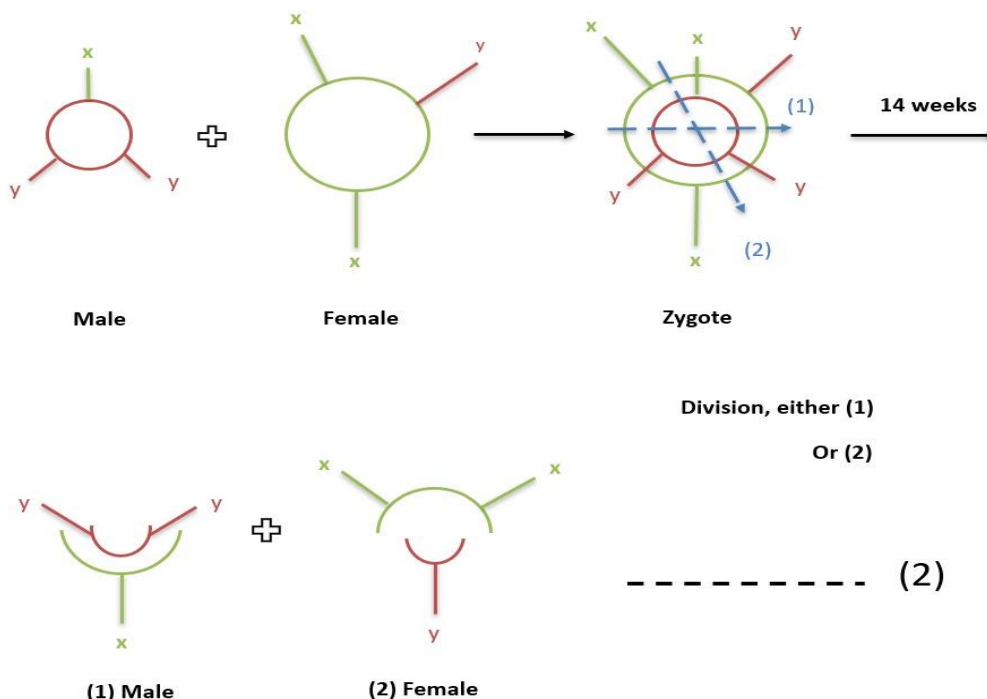
\* The suggesting model:

Are as the following,

The symbols(Y) male trait and(X) female trait... (e.q1)

$$y - x - y + x - y - x \xrightarrow{\text{fuses}} y - x - y \dots x - y - x \dots (1)$$

Male          female          zygote



#### 4. CONCLUSION

1. The presence of the female characteristic (X) in the male(Y-X-Y) is responsible for generating the desire in the male to mating with the female, and vice versa, the presence of male characteristic (Y) in the female (X-Y-X) is responsible for generating the desire in the female to mating with male.
2. The appearance of male characteristic in New born girl is due to the presence of (Y) in the characteristic of the mother (female), (X-Y-X), like wise, the appearance of female characteristic in the new born boy is due to the presence of (X) in the father( male) ( Y-X-Y).
3. The remaining divisions of zygote may be responsible for forming the placenta that surrounds the fetus and is a means of preserving it and delivering food and oxygen to it from the mother's blood.

#### REFERENCES

- [1] Lisa urry, Peter Raven , Dennis Holly and others, College Biology.ch.12.Asupplement to college Biology vol.(1-3).- Peter.H.Raven, Geoger B. Johnson an Loso, Science of Biology.(2011) 9<sup>th</sup> Ed.ch.13 p 239. Biology,..<<https://www.topper.com>.
- [2] Peter.H.Raven, George.B. Johnson and Los,Science of Biology.(2011)9<sup>th</sup> .Ed p 262.
- [3] Jackson B.Roberts and others(2024). J.of heredity Oxford academic, oxford university.press,Latest issue vol.15, 6 December.
- [4] home....<<https://www.msmanual.com>
- [5] Jeremy N.Berg, John L.Tymoczko and Dobert Stryer,(2002) p(1087-1090), Publisher pal grave MacMillan International ....<<https://pubmed.ncbi.nlm.nih.gov>
- [6] .....><https://www.hopkinsmedicine.org> ,John's Hopkins .medicine
- [7] NB...<<https://www.ncbi.nlm.nih.gov>
- [8] .....><https://altibbi.com>
- [9] pr...<<https://www.bodyiogenicmd.com>
- [10] Esther M.Sterbergin, chemical L.Butts, Dubois Lupus,(2013) 8<sup>th</sup> .Ed.Erythematous and Related Syndromes.