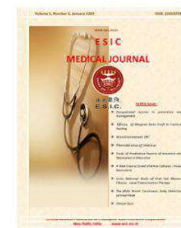




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## Case Report

### A CASE OF GALACTORRHEA IN MALE

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**ABSTRACT** - Galactorrhea is the inappropriate discharge of milk containing fluid from the breast. It is considered abnormal if it persists for longer than 6 months after cessation of breastfeeding in a female. current case reports a case of 38 year old male who presented with gynaecomastia, primary infertility, eunuchoid body proportions with low testosterone levels, elevated gonadotropins and his peripheral blood karyotype showed 47XXY pattern and discuss management.

#### Introduction

Galactorrhoea can be seen both men and women, it can be either unilaterally or bilaterally. It is commonly associated with hyperprolactinemia. The causes of hyperprolactinemia can be physiological hypersecretion, hypothalamic pituitary stalk damage, pituitary hypersecretion, systemic disorders and drug induced hypersecretion. When symptoms or clinical features suggest androgen deficiency, the laboratory evaluation is initiated by measurement of total testosterone; preferably in morning sample. When androgen deficiency has been confirmed, LH should be measured to classify the patient as having primary ( high LH ) or secondary ( low LH ) . An elevated LH indicates that the defect is at the testicular level.

Common causes of primary testicular failure include Klinefelter Syndrome, HIV infection, uncorrected cryptorchidism, cancer chemotherapeutic agents ,radiation, surgical orchidectomy and prior infectious orchitis.

In secondary hypogonadism, the defect resides at the hypothalamic - pituitary level<sup>[1]</sup>. Common causes include space occupying lesions of the Sella, hyperprolactinemia, chronic illness, hemochromatosis and substance abuse. Measurement of prolactin levels and MRI of pituitary region can identify / exclude space occupying lesion.

#### Case Report

A 38 year old gentleman presented with history of milky white discharge from both breasts (right> left) for a duration of 2 months. He had associated pain in both breasts and minimal enlargement of right breast which he noted recently.

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there was no history of a headache or visual disturbances. He gave a history of impotence and primary infertility. He had no addictions. There was no history of any drug intake /head trauma/seizure disorder/ liver disease.

The patient was tall statured with normal facial features. He had gynecomastia on the right side along with the absence of pubic and axillary hairs and testicular atrophy. We proceeded evaluation for the causes of hypogonadism. Investigations revealed low serum levels of testosterone, high levels of luteinizing hormone and follicle stimulating hormone pointing to a cause of primary testicular failure. His serum prolactin level was towards the upper limit of normal range. Serum prolactin - 16.5 ng/ml (2.5 - 18.2)

Testosterone	-	2	ng/ml	(3	-10)
FSH	-	24.85	mIU/ml	(0.9	-11.9)
LH	-	17.34	mIU/ml	(1.1	- 8.7)

Other blood investigations including a complete hemogram, liver, and renal function tests and other hormonal levels were within normal limits. HIV 1 & 2 antibody negative. Ultrasonogram of breasts-minimal glandular and ductal proliferation beneath the right nipple. Ultrasonogram of testes-severe atrophy of both testicles observed without any focal lesions. Semen analysis-azoospermia. The patient was sent to endocrinologist at empaneled hospital for expert opinion who suggested karyotyping along with MRI Brain

MRI brain there was no evidence of pituitary microadenoma Chromosome analysis was carried out using peripheral blood lymphocyte microculture method. it showed 47XXY pattern. Hence the diagnosis of Klinefelter syndrome was made. Patient is being treated with cabergoline 0.5 mg twice weekly and is planned for surgical resection of breast tissue. ed <sup>[2]</sup>.

## Discussion

When symptoms and clinical features of androgen deficiency is seen an early morning testosterone assay should be perform. Low testosterone level in the presence of elevated LH level indicates that defect is at the testicular level. Common causes of primary testicular failure<sup>[3]</sup> include Klinefelter syndrome, HIV infection, uncorrected cryptorchidism, cancer chemotherapeutic agents, radiation, surgical orchidectomy or prior infectious orchitis. Klinefelter syndrome is the most common sex chromosomal aneuploidy in males with an incidence of 0.1 to 0.2 % in the general population. Approximately 80 % of them have 47, XXY chromosome complement. It most often results from meiotic non disjunction of an X chromosome during parental gametogenesis.



The diagnosis is rarely made before puberty because of the paucity of clinical manifestations in childhood. Full scale IQ scores may be normal with verbal IQ being somewhat decreased. They tend to be tall, slim and specific tendency to have long legs.

Testes tend to be small for age. Bone mineral density may be low in adults. Approximately 80 % adults have gynecomastia. Azoospermia and infertility are usual. There is increased incidence of central Adiposity metabolic syndrome, pulmonary disease, varicose veins and cancer of breast, they may also be associated with haematologic malignancies.

**Management** - Androgen supplementation provides symptomatic improvement but may worsen gynecomastia. Gynecomastia should be treated by surgical resection. Fertility has been achieved using in vitro fertilization in men with oligospermia. Following ICSI and embryo transfer, successful pregnancies can be achieved in up to 50% cases. Preimplantation screening may be considered because of the risk of transmission of this chromosomal anomaly.

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