

Shalamar Hospital is striving to provide our patients quality health care, at lowest possible costs. Our hospital is continually active in pioneering new treatments and therapies to improve the lives of people in our community.




## BREASTFEEDING WITH HYPOPT


Breastfeeding poses little risk to the newborn, but the mother should continue to undergo surveillance for necessary adjustments to calcium and activated vitamin D supplementations.

## ENDOCRINE SURGERY CLINIC

Department of Surgery, Shalamar Hospital

 Shalimar Link Road, Lahore.

 Shalamar74

 +92 (42) 111-205-205 Ext: 325

 [www.shalamarhospital.org.pk](http://www.shalamarhospital.org.pk)



**PARATHYROID DISORDERS**  
GUIDE DURING  
PRECONCEPTION, PREGNANCY  
AND LACTATION

For women of child-bearing age, non-functioning parathyroid glands can pose certain risks to a normal pregnancy.

The parathyroids are four, very small glands located in the neck just behind the thyroid gland. They secrete a natural chemical called parathyroid hormone (PTH) into the bloodstream. PTH helps to control the levels of two salts in the body: calcium and phosphorus. If one or more of these glands begin to produce too much or too little PTH, this causes blood calcium levels to either rise or fall. This condition is known as a parathyroid disorder, of which the two most common forms are Primary Hyperparathyroidism (PHPT), and Hypoparathyroidism (HypoPT)

- PHPT occurs when there is too much PTH produced.
- HypoPT occurs when there is too little PTH produced.

## PRIMARY HYPERPARATHYROIDISM (PHPT)

Effects of High PTH Levels

When PTH levels are high, blood calcium levels rise (hypercalcemia) and phosphate levels fall (hypophosphatemia).

## IMPORTANT CONSIDERATIONS FOR PHPT AND PREGNANCY

PHPT with hypercalcemia can be harmful to both the unborn and newborn babies. The recommended treatment is surgical removal of one or more of the parathyroid glands. It is advisable to delay pregnancy, if possible, until after surgery, as PHPT is usually cured with this approach.

## POTENTIAL RISKS OF PHPT DURING PREGNANCY

PHPT may go undetected during pregnancy when calcium levels are only slightly elevated, but the risk of complications increases with higher calcium levels. Possible pregnancy complications include miscarriage and hampered growth of the unborn. Mothers with PHPT are also at risk of kidney stones, inflammation of the pancreas, and high blood pressure with problems of other organs (preeclampsia).

## SURGICAL TREATMENT OF PHPT DURING PREGNANCY

Surgery is recommended for women diagnosed with PHPT before pregnancy and those with high calcium levels during pregnancy, preferably during the second trimester. If surgery is delayed, calcium levels can be reduced by increasing fluid intake or with medication such as cinacalcet, which is safe for use during pregnancy but crosses the placenta.

## MONITORING FOR WOMEN WITH PHPT DURING PREGNANCY

Regular blood tests are recommended every 4 weeks, or more frequently if medication dosage is changed.

## RISKS OF PHPT FOR NEWBORNS

Newborns of women with PHPT may have low calcium levels due to suppression of fetal PTH caused by high calcium levels in the mother during pregnancy. This can lead to seizures in the newborn, but the parathyroid glands of the newborn usually recover within a few weeks, restoring normal calcium levels.

## BREASTFEEDING WITH PHPT

Maternal calcium levels should be monitored regularly after childbirth, and if medication is needed to keep calcium levels low, the mother should discuss the risks and benefits of breastfeeding with her doctor. Calcium levels should be measured in the first week after delivery and continue every 4-8 weeks. If surgery is planned, it is advisable to wait until the mother has recovered from labor before conducting calcium level measurements.

## HYPOPARATHYROIDISM (HYPOPT)

When the level of parathyroid hormone (PTH) is low, it can cause hypocalcemia (low blood calcium levels) and hyperphosphatemia (high blood phosphate levels).

## WHAT WOMEN SHOULD KNOW ABOUT HYPOPT BEFORE GETTING PREGNANT

It is unpredictable whether the calcium/activated vitamin D supplementation needs will increase or decrease during pregnancy. Frequent blood tests are necessary to determine any adjustments needed for calcium and activated vitamin D supplements.

## PREGNANCY AND HYPOPT

As long as the mother maintains her medication daily and undergoes regular blood tests, most mothers with HypoPT will have a healthy baby. However, there is a suggestion that HypoPT may lead to induced labor, lower birth weight, fetal loss, preterm delivery, and disturbed skeletal development in the unborn baby if calcium levels are not regulated properly.

## TREATMENT OF HYPOPT DURING PREGNANCY

Mothers with HypoPT should be treated with calcium and activated vitamin D supplements during their pregnancy, with possible adjustments as the pregnancy advances. The treatment aim is to maintain albumin-adjusted calcium levels in the lower end of the reference range.