

## INTRODUCTION

Thyroid problems caused by excess of iodine may result from direct ingestion , absorption from the skin and mucus membranes or from administration of organic iodine containing compounds such as amiodarone and radiological contrast media ( *Nebama et al ., 1997* ) .

Excess iodine has a well known inhibitory effect on thyroid hormone synthesis and release ( the Wolf – Chaikoff effect ) . ( *Catherine et al ., 1995* ) .

This effect is transient and despite the maintenance of thigh doses of circulating iodide , a mature Thyroid gland escapes from its inhibition after about 48 hours .

Iodine is known to induce transient hypothyroidism in term infants undergoing major iodine exposure as in surgical procedures . However , the adverse effects of topical iodine is controversial ( *Digoerge , 2000* ) .

Preterm infants especially vulnerable to the influence of excess iodine .

Unlike mature thyroid glands , those of premature infants may be unable to escape from the inhibition of the Wolf – Chaikoff effect during long term exposure to an excess of iodine . ( *Nebama et al ., 1997* ) .

In addition , the small amount of subcutaneous tissue makes them prone to absorb larger quantities of iodine from topical disinfections .