

To compare our results with single versus double dartous layers Snodgrass technique for hypospadias repair, a comparative study was done and the results were compared in term of: the overall success and complications rates, percentage of each complication (urethrocutaneous fistula, meatal stenosis, urethral diverticulum and glandular or complete neourethradehiscence) with final cosmetic appearance and straightening of urinary stream. The study was extended from January 2013 to June 2015; including a randomly selected forty three children with median age of 29 months (range from 12 to 66 months) with a primary hypospadias. Patients were divided into 2 groups: Group 1 include 21 patients that were selected to be operated by a single layer TIP technique. Group 2 include 22 patients that were selected to be operated by a double layer TIP technique. All patients under went Snodgrass technique urethroplasty in the surgical theater of Al-Diwaniya teaching general hospital under general anesthesia. The results shows a higher overall success rate and cosmetic appearance with lower complications for patients in group 2 in comparison to those in group 1 with no statistically significant difference. The neourethral covering in TIP hypospadias repair (Snodgrass technique) with double-dartos flap yield a better cosmetic and functional results in comparison to single dartos flap cover in terms of increasing success rate and minimizing complications specially in decreasing the rate of urethrocutaneous fistula formation which is the most common complication following this type of surgery.