



MAX
Healthcare

Clinical audit on reduction of insitu DJ Stent related comorbidities

Max Super Specialty Hospital Mohali

Case study which led to inception of this project

- 73 years old patient suffered from **pain in abdomen region** for which she got investigated at and was found to have **fibroids in Uterus**. Patient was then operated at in some other hospital.
- **Postsurgically** patient developed the **problem of urination/dribbling**. On further examination the patient was found to have **Vesicovaginal fistula (VVF)** for which she was referred to Max Super Specialty Hospital Mohali.
- The patient got admitted to Max Hospital Mohali on for VVF Repair. The patient was operated for diagnostic cystoscopy + exploration & repair of VVF.
- Patient and Attendant **were informed in writing** on discharge summary that DJ Stent has to be removed after 3 weeks but the same was not explained in detail.
- **No follow up** was done with the patient or attendant regarding DJ Stent removal.
- Later the patient again started complaining of pain in abdomen. Renal Scan revealed that Right kidney of the patient has suffered impairment due to insitu DJ Stent.

Project Introduction

- DJ stent is a **boon** for Urology and Kidney transplant units as it helps in good urinary drainage from kidney to the bladder and is usually well tolerated by the patient.
- However it is **eminent that the DJ stents are removed** after stipulated **period of time i.e. 6 weeks**.
- In situ **DJ Stents are known to cause complications** of minor nature such as **hematuria, dysuria, frequency, low back ache and suprapubic pain or may be more major such as vesico ureteric reflux, migration, encrustation, urinary tract infection (UTI), stent fracture and secondary vesical calculus** formation.
- In order to avoid any such complications due to insitu stents the **proper education** of patient and attendant about the removal of DJ stent is noteworthy.

Standard of Care

- 100% Cases undergoing Kidney transplants and Urology cases must have DJ Stent removal within 3-6 weeks, unless the removal is contraindicated.
- All Discharge summaries must contain instruction DJ Stent removal in both the surgeries.

Sample size

1st Phase of Study - Jan 2021 till March 2021.

- Total of 105 such procedures were taken up which included 41 transplants and 64 Urological procedures.

2nd phase of study- July 2021 to Oct 2021.

- Total of 82 such procedures were taken up which included 44 transplants and 38 Urological procedures.

Root Cause Analysis

- **Lack of awareness** amongst the **Resident doctors and Departmental.**
- **Casual attitude** of Resident Doctors on overlooking of the Instruction in Discharge summary.
- **Process was not streamlined.**
- **Lack of supervision** of the project.

Improvements Initiated

- **Audit observations** were **discussed** with the **consultants.**
- **Departmental coordinators** were **sensitized.**
- **Resident Doctor** on floor were **trained on Discharge summary preparation** for DJ stent Surgeries must contain clear instructions on DJ Stent.
- **Trainings curriculum** revised .
- **Follow up** of cases was **strengthened.**
- **Daily audits** were started on the **discharge summary.**
- **Weekly follow up** of cases due for **DJ Stent removal** taken from Departmental Coordinator.

Results

- **Percentage of cases in which Stent removal was not carried out** has reduced from **6%** in Jan-March 2021 to **4%** in month of Jul-Oct 2021. **Major improvement shown in KTP's from 12% to 5%.**
- **Percentage of cases not having clear instructions on DJ Stent removal** have shown a decline from **15%** in Jan-March 2021 to **2%** in July-Oct 2021. **Major improvement seen in Urology.**

“Clinical audit on reduction of insitu DJ related comorbidities” has helped us in **improving Patient Safety** by **reducing the complications** resulting from insitu DJ related comorbidities. The audit has also **helped reducing** the **litigation probability** due to the possible complication **hence reducing the overall financial burden** related to the Medicolegal suite.

SO THAT IS HOW WE AT MAX MOHALI HAD A “GOOD SPIN ON A BAD EVENT”.

Thank You