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A study of clinical profile, investigations, treatment and outcome of surgical site infection in the department of OBG

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Abstract
Gynaecology and Obstetrics office frequently sees cases pertaining to surgical site infections. It can be due to the negligence factors that can be contributed by patients as well as doctors and nursing homes. But if not immediately acted upon can be tragic. So identifying such cases and prompt treatment is the need of the hour.

Keywords: surgical site infection, clinical profile, investigations, Treatment, Outcome

Introduction
Gynaecology and Obstetrics office frequently sees cases pertaining to surgical site infections. It can be due to the negligence factors that can be contributed by patients as well as doctors and nursing homes. But if not immediately acted upon can be tragic. So identifying such cases and prompt treatment is the need of the hour.

Surgical site infection are one of the most common infectious problems that are frequently encountered in our office [1, 2]. A plethora of clinical profiles are encountered in our day to day practice [3]. According to some studies around 25-30 percent of all infection cases are accounted by surgical site infection. Resistant variants are also frequently encountered which adds the bulk to the difficulties that are already faced [4-7]. Fever because of infection is the most common symptom that will be encountered but it is said that the symptoms actually depends upon a lot of factors and immunity is definitely the one to be considered [8, 9]. A plethora of signs and symptoms can be encountered in our day to day practice[3]. Abdominal abdominal pain, vomiting and flank pains are the other symptoms that patients commonly complain of [10, 11]. E-Coli is supposed to be the frequently and most commonly encountered bacteria in surgical site infection. Diabetes and other immunosuppressed states account for more number of cases. Extended-spectrum beta-lactamases are enzymes that are produced by these bacterias that gives resistance to most beta-lactam antibiotics [12-15].

So this study puts in an effort to find the clinical profile, investigations, treatment and outcome of surgical site infection in the field of OBG.

Aims and Objectives
To study the clinical profile, investigations, treatment and outcome of in the field of OBG.

Materials and Methods
Study design: A retrospective study.
Study period: September 2018 – September 2019.
Study setting: Department of OBG
Study population: All non – pregnant patients presented to our center Kanachur Institute of Medical Sciences, Mangalore.
Sample size: 31 patients
Study group: Patients clinically diagnosed with UTI

Inclusion criteria
1. Non-pregnant females

2. Clinically Diagnosed

Exclusion Criteria

1. Pregnant females
2. Patients on immunosuppressant drugs

Results

Table 1: Age Distribtion of surgical site infection

Number	Mean age	Std Deviation
31	31.23 years	09.43 years

Table 2: Co-Morbidities:

Co-Morbidities	Frequency
HTN	01
DM	01
DM and HTN	00

Table 3: Signs and Symptoms

Signs and Symptoms	Frequency	Sig
Fever	31	Sig (p<0.001)
Abdominal Pain	08	
Vomiting	11	

Table 4: Serum Albumin Levels:

Serum Albumin Level	Number of Patients
Group 1 (<2 gm / Dl)	03
Group 2 (2 - 5 gm / Dl)	08
Group 3 (> 5 gm / Dl)	21

Table 5: Bacterial Profile

Bacteria	Frequency
P - Pseudomonas aeruginosa	02
EC- Escherichia coli	23
AB- Acinetobacter baumannii	02
EA- Enterobacter aerogenes	01
K- Klebsiella pneumoniz	03

Table 6: Sensitivity

	EC	P	AB	EA	K
Amikacin	4	2	2	1	1
Gentamycin	4	4	1		2
Ceftazidime	1				1
Ciprofloxacin	4	1			5
Norfloxacin					7
Levofloxacin	1	1			1
Nitrofurantoin					
Fosfomycin					
Trimethhoprim/Sulfamethoxozole	4				
Piperacillin/Tozabactam	4		1	2	1
Tigecycline		1		1	
Cefta			1		
Amoxiclav		1			
Doripenem	3	3		1	1
Meropenem	1	3		3	4
Linezolid					
Teicoplanin					
Vancomycin					
Tetracycline					
Ceftazidime	1				2
Cefexime		1			2
Cefoperazone/Sulbactam	1			2	2
Cefepime	2	1			2
ceftazidime					2
Ampicillin/Sulbactam			1		

Discussion

Most of the bacterial isolates from the site were sensitive to Aminoglycosides and Third generation Cephalosporins. Those resistant strains showed sensitivity to Piperacillin or Carbapenems. Surgical site infections (SSIs) is or can be defined as infections occurring after surgery. The time limit is set at upto 30 days but it depends on country to country and each country has their own protocols. The affecting either the incision or deep tissue at the operation site. Despite prevention or preventive care taken appropriately, SSIs remain a significant clinical problem especially in our country as they are known to be associated with substantial mortality and morbidity and impose severe demands on healthcare resources. But in a country like ours it causes more burden to the already burdened system. The incidence of SSIs may be as high as 20% according to western literature but can be more because in our country there is no proper maintenance of the records. It also depends on the surgical procedure, the surveillance criteria used, and the quality of data collection but no literature is available on gynaecological procedures alone. In many SSIs, the responsible pathogens originate from the patient's endogenous flora. The hygiene of the patient is also important in other words. The causative pathogens depend on the type of surgery; the most commonly isolated organisms are Staphylococcus aureus, coagulase-negative staphylococci, Enterococcus spp. and Escherichia coli in studies conducted across the world. In our study E-Coli was found commonly. Numerous factors that are related to patients and procedures are known to influence the risk of SSI, and hence prevention is also needed at the same time.. The Centers for Disease Control and Prevention guidelines for the prevention of SSIs emphasise the importance of good patient preparation, aseptic practice, and attention to surgical technique; antimicrobial prophylaxis is also indicated in specific circumstances.

Conclusion

Fever is the most persistent sign and this has to be looked along so as to provide the prompt treatment. Albumin levels also has to be checked in order to find the prognosis as it has a definite effect.

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