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MIMER MEDICAL COLLEGE

DEPARTMENT OF MICROBIOLOGY

NEWSLETTER JAN - MAR 2025

“Pathway to Success” - Peer Guidance Session for Second MBBS Students : 06th March 2025

Dr. Sandhya S. Kulkarni was the Chairperson at “CME 2025” held by A.G Diagnostics in association with IMA Pune on Sunday 23rd February 2025

Dr. Komal Biyani presented on “All About Guillain Barre Syndrome” on 4th Feb 2024

Elective Posting : March 2025

Publications by the faculties in Indexed Journals including In International Journal “THE LANCET”

Guillain–Barré syndrome outbreak in Pune: a health emergency

The recent outbreak of Guillain–Barré syndrome in Pune (India) has become a matter of increasing national concern and has warranted the involvement of international agencies.[1] As of March 8, 2025, the total number of Guillain–Barré syndrome cases in Pune was 225, with 197 confirmed diagnoses and 28 suspected cases, and can be considered as one of the largest Guillain–Barré syndrome outbreaks.[2,3] The death toll has risen to 23 people in India, and Pune continues to be the worst affected with 11 deaths from Guillain–Barré syndrome.[4] As cases continue to rise and spread in different states (eg, Assam, Karnataka, Andra Pradesh, and Tamil Nadu), this outbreak is taking a disturbing dimension.[3]

Guillain–Barré syndrome is a rare neurological disorder, in which a person's immune system attacks the peripheral nerves,[5] and has been linked with preceding viral infections.[6] The recent outbreak has been linked to microbes, *Campylobacter jejuni*, and norovirus, and contaminated water is the primary source of infection. 25 stool samples from patients with Guillain–Barré syndrome tested positive for *C jejuni* and 11 tested positive for norovirus. Presence of coliform *Escherichia coli*, norovirus, and *C jejuni* bacteria was found in 40 water samples in affected areas in and around Pune.[7] Several agencies—including expert teams from federal and state departments—and WHO are working together to ensure that the outbreak is contained.

Currently, in light of new strains of virus and disease, some low-income and middle-income countries struggle with common infectious diseases caused by arboviruses and improper hygiene and sanitation, including safe water supply. The Guillain–Barré syndrome outbreak in Pune is one such instance where cases of *C jejuni* infection have rapidly increased due to poor water resources, causing havoc in the form of Guillain–Barré syndrome. Questions arise as to how to curtail and limit the spread of this disease. What is needed is to understand the key importance of maintaining robust infrastructure, particularly water sanitation systems. Countries with better infrastructure have fewer Guillain–Barré syndrome cases linked to *Campylobacter*.[5] Public education on hygiene practices, continuous surveillance, and research play an important role in understanding the pathogenesis of Guillain–Barré syndrome. The triggering infection for the outbreak needs to be investigated in detail, as does the emphasis of the outbreak as waterborne. New laws should be enacted to enforce the supply of safe and clean water by responsible government bodies. By implementing these public health measures, future risk of disease outbreaks can be minimised.

We declare no competing interests.

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1 Biswas S. Guillain-Barré syndrome: India faces outbreak of creeping paralysis. British Broadcasting Corporation, Feb 3, 2025. https://www.bbc.com/news/articles/c203l8gqnpxo (accessed Feb 21, 2025).
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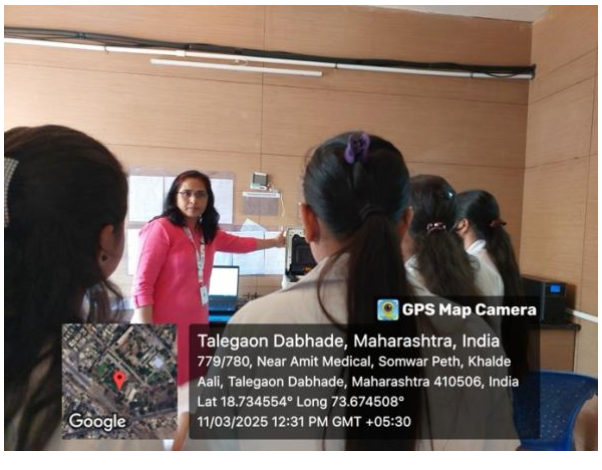
Active participation of students during AETCOM lecture

Interaction with the Students of Indriyani College



Mrs. Smita Watwe won 2nd Prize in Antakshari in Plexus 2025

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MIMER MEDICAL COLLEGE

DEPARTMENT OF MICROBIOLOGY

Newsletter April-June 2025

Seminar presented by II MBBS students

Publications by the faculties in the Indexed Journals

Case Report

Inactive *Escherichia coli* causing perianal abscess

Smita Anand Watwe, Nikunja Kumar Das, Sadhana Chate, Sahjid Mukhida[1]
Department of Microbiology, MAEER MIT Pune's MIMER Medical College and Dr. BSTR Hospital, [1]Department of Microbiology, Dr. D. Y. Patil Medical College, Hospital and Research Centre, Pune, Maharashtra, India

Abstract *Escherichia coli* is a common organism, and its several variants, like inactive, can cause severe human infection, which is difficult to identify in the microbiology laboratory. We present a perianal abscess case report in which we got nonlactose fermenting, nonmotile biochemically inactive bacterial growth. It was not identified by conventional biochemical methods. Final diagnosis of *E. coli* was done by the automated system and antibiotic treatment was suggested as per the antibiotic susceptibility testing by conventional as well as automated methods. It was found susceptible to amoxicillin–clavulanic acid, piperacillin–tazobactam, and meropenem. The patient was treated with piperacillin–tazobactam combination and get recovered. Inactive *E. coli* differs from typical *E. coli* based on motility testing and lactose fermentation. However, other biochemical test results are similar to typical *E. coli*.

Keywords: Drug-susceptibility, inactive *Escherichia coli*, nonmotile, perianal abscess

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E-mail: drssmukhida@rediffmail.com
Submitted: 26-Sep-2024, **Revised:** 11-Jan-2025, **Accepted:** 12-Jan-2025, **Published:** 14-Feb-2025.

INTRODUCTION

Bacterial infections always need correct identification to plan appropriate treatment.[1] Several times, bacterial identification is not as easy as routine due to variations in the bio-chemical and other characteristics of common bacterial isolates. *Escherichia coli* is a common organism that is gram-negative, motile, nonspore-forming, noncapsulated, fermentative, and facultative anaerobic bacillus.[2] It is a part of the resident flora of the human gut and can cause urinary tract infections, diarrhea, wound infections, and many more. Their mutated version differs due to some characteristic variations such as motility, sugar fermentation, and others. Due to those variations, it is known as inactive *E. coli*.[3] We are presenting a case of inactive *E. coli* causing perianal abscess.

CASE REPORT

A 35-year-old male presented to OPD of a rural tertiary care center in outer Pune on August 23, 2024 with complaints of pain and swelling over the perianal area. The person gave a history of similar episodes in the past 2 years and had the pus drained in this institute. A diagnosis of recurrent perianal abscess was made, and he was admitted. A drainage was made, and 30–40 cc of pus was drained.

LABORATORY FINDINGS

On admission, hemoglobin-15.6 g/dL, red blood cell-6.04 × 10^6/µL, white blood cell-18,380/µL (including 85% neutrophils, 10% lymphocytes, and 5% monocytes),

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Letter to the Editor

Rising Co-incidence of Chikungunya and Guillain-Barré Syndrome in Maharashtra, India

Swati Sahai, Nikunja Kumar Das, Sadhana S. Chate, Sandhya S. Kulkarni
Department of Microbiology, MAEER MIT Pune's MIMER Medical College and Dr. BSTR Hospital, Talegaon Dabhade, Pune, Maharashtra, India

To The Editor,

Chikungunya is a viral illness disease spread by Aedes mosquitoes, which bite during the daytime. This illness has become a growing public health issue in India in 2024, particularly in Maharashtra, which recorded approximately 2,643 chikungunya cases as of September, an increase of 55% from the previous year. Across India, chikungunya cases reached 69,395 by early September, with a projected rise that may exceed past year's total of 200,064 cases.[1-3]

The rise in Chikungunya cases within the state of Maharashtra has been noticed more in urbanized cities, such as Pune, Mumbai, Nagpur, and Kolhapur. Among the reported cases, Nagpur tops the chart with 741 cases while Mumbai comes second with 338 cases, followed by Pune city with 227 cases and Kolhapur with 164 cases. The districts with the most cases are Kolhapur (219), Pune (193), Amravati (156), and Akola (129).[4]

Chikungunya may present symptoms including fever, joint pains, and tiredness attributed to the disease. In recent times however, the virus has been associated with severe complications affecting the nervous[5] system, particularly Guillain-Barré Syndrome (GBS). GBS is a disorder of the autoimmune system characterized by the body's immune system attacking the peripheral nerves and has a range of symptoms from muscle weakness to paralysis. It has been shown in studies that patients recovering from chikungunya are at increased risk of developing GBS but more so for patients with underlying diseases, such as diabetes or heart diseases.

Various factors have been implicated for the surge in chikungunya cases, one of them being warmer climates and increased breeding of mosquitoes in both the towns and the villages, hence making it easier for the virus to spread. Reporting system issues have hindered accurate assessment of chikungunya's burden and related complications, such as GBS. There is always a tendency to underreport where there exists access to only minimal healthcare because such places do not allow for effective early outbreak detection and response measures.

Recent studies have revealed a possible association between chikungunya infection and the occurrence of GBS. Such association is speculative and is related to the defense response called "molecular mimicry." Chikungunya infections trigger a response from the immune system, but it is possible that due to the resemblance of some of the viral particles to the structures of the peripheral nerves, the immune system may destroy some of the nerve cells. This has been reported with other viruses spread by mosquitoes including Zika and could lead to an increased incidence of GBS after chikungunya infection.[5,6]

IMPACT IN MAHARASHTRA

Maharashtra like other parts of the world witnessed epidemics of the disease where hospitals reported many cases of chikungunya-related GBS. In the year 2024 for instance, hospitals in Mumbai noted 30% more incidences of GBS within the same season as outbreaks of chikungunya were reported. The signs and symptoms of GBS include weakness of the muscles, numbness or tingling around the body, and in some cases leading to total paralysis over a period of time. In Pune, health authorities have issued GBS following chikungunya

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Letter to Editor

Addressing the challenges in diagnosing and managing acute febrile illness in Eastern India

Dear Editor,

The study *"A Clinicoepidemiological Study of Serologically Diagnosed Acute Febrile Illness (AFI) in a Teaching Hospital, Kolkata"* published in October 2024[1] outlines some of the important issues that arise in the diagnosis and management of acute febrile illness. It brings into light the pressing need to deal with the challenges of overlapping symptoms, seasonal spikes in cases, and the limited diagnostic tools.

As found in the study, dengue fever remained the leading viral illness associated with acute febrile illness (AFI) over the vast majority of cases—followed by infections such as leptospirosis, scrub typhus, malaria, and enteric fever. The complications associated with the mortality patterns of diseases such as scrub typhus and leptospirosis are also alarming. There is evidently a gap in the ability to provide proper care to individuals at risk of suffering acute kidney injury and brain infections such as meningoencephalitis due to a lack of timely and accurate diagnoses. There is an urgent necessity to deal with the problems related to the existing diagnostic delays which is most commonly due to the unavailability of certain tools and the lack of knowledge, education, and information on local diseases.

Although serological testing methods are practical due to their availability and rapid results, they are prone to cross-reactivity and have suboptimal sensitivity, especially when the disease is still in its early forms.[2,3] The use of more sophisticated diagnostic methods, like multiplex PCR has the advantages of being able to test for several organisms at the same time with high levels of sensitivity and specificity. But, the use of such technologies is still not fully accessible for the population at large in the poore countries.

In light of these findings, it is of utmost importance t incorporate several aspects in the management of AFI. First, it i necessary for the healthcare systems in eastern India to construc regional epidemiological databases so that clinicians understan the existing pathogens and their clinical scenarios. Secon better management of AFI cases among the healthcare worke through training, periodical refresher courses and integration o management of fever into the treatment guidelines of the regio can enhance the results.

Furthermore, it is also crucial to include advanced diagnosti facilities, for instance, PCR-based syndromic approaches. Th technology could be made more available through public-privat partnerships. Community-level measures, such as provisio of health education and enhancing sanitation, are also ver important for alleviating these vector-heightened diseases.

The research offers a vital guide to decision-makers and healt practitioners in combating the rising menace of factors causin acute febrile illness (AFI) in India. It is quite possible to interven in the burden of morbidity and mortality related to acut febrile illness (AFI) through the appropriate use of moder evidence-based techniques in management of such illness a well as modern technology.

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

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Department of Microbiology, MAEER MIT Pune's MIME Medical College and Dr. BSTR Hospital, Pun Maharashtra, Indi

Museum Study

Dr. Sandhya S. Kulkarni participated as the Nodal Officer for SIP 2025


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Small Group Teaching (SGT) conducted by the faculties

Faculty Development Programs


ICMR-National Institute of Epidemiology

certifies that

SWATI SAHAI

has successfully completed the online course

NIeCer 103: Scientific Writing in Health Research

with a score of 95%

DR. JEYASHREE K — Course Coordinator & Scientist-E, ICMR-NIE

DR. MANOJ V MURHEKAR — Scientist-G & Director, ICMR-NIE

DR. MANICKAM P — Scientist-F, ICMR-NIE

Roll No: NIeCer103_30962

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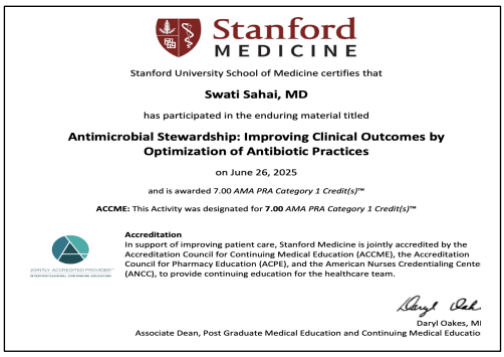
June 2025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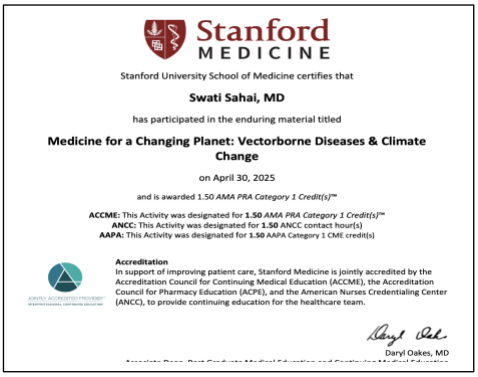
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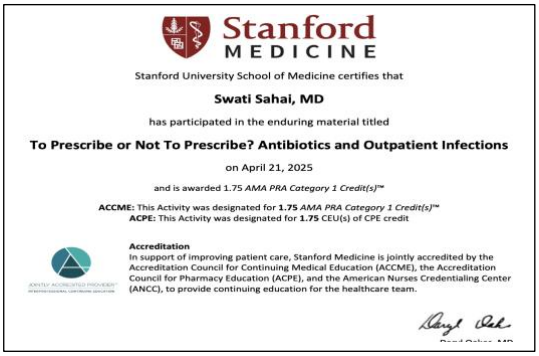
Daryl Oakes, MD

Associate Dean, Post Graduate Medical Education and Continuing Medical Education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2025

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Newsletter July-September 2025

Dr. Swati Sahai presented on "Microbial Films and Antimicrobial Resistance: Challenges and Innovative Therapeutic Interventions" on July 14, 2025 in Research & Development Session

CCL Training of B.Sc Biotechnology students

Basic Course in Medical education attended by Dr. Gauri Yadav & Dr. Swati Sahai from 7th to 9th July 2025

Sepsis Day Celebration on 15th September, 2025

PG activity by Dr. Vidyagauri on 26th September, 2025

ORIGINAL RESEARCH PAPER

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

RISK FACTORS CONTRIBUTING TO CATHETER-ASSOCIATED URINARY TRACT INFECTIONS: A HOSPITAL-BASED CROSS-SECTIONAL STUDY

Microbiology

Dr. Swati Sahai* Assistant Professor, Department Of Microbiology, MIMER Medical College & Dr. BSTR Hospital, Talegaon (D), Pune-410507, Maharashtra. *Corresponding Author

Dr. David Agatha Professor, Department Of Microbiology, Madras Medical College, Chennai.

ABSTRACT

Background: Catheter-associated urinary tract infections (CAUTIs) remain the most frequently encountered hospital-acquired infections. Their occurrence is influenced by multiple clinical and demographic risk factors. **Objective:** This study aimed to explore the relationship between symptomatic CAUTI and commonly reported high-risk variables. **Methods:** A cross-sectional analysis was carried out over a 12-month period, enrolling 100 patients with indwelling urinary catheters. Symptomatic CAUTI was identified using established diagnostic criteria. Potential contributing factors such as age, sex, duration of catheterization, diabetes, immunosuppressive therapy, and underlying medical conditions were examined for association. **Results:** The incidence of CAUTI was calculated at 25.67 per 1,000 catheter days. The highest frequency was noted among patients aged 71–80 years. Diabetes mellitus was strongly associated with infection, conferring nearly six-fold higher odds. Similarly, neurological disorders (Odds Ratio 5.16) and respiratory diseases (Odds Ratio 6.44) were significant risk factors. Patients with pre-existing urological or nephrological conditions demonstrated the greatest vulnerability, with an odds ratio of 13.27. **Conclusion:** Identifying individuals at increased risk of CAUTI is essential for guiding preventive strategies. Limiting catheter duration, optimizing glycemic control, and ensuring adherence to aseptic practices during insertion and maintenance are key measures. Incorporating a structured "catheter care bundle" may further decrease infection rates.

KEYWORDS

catheter-related infections, hospital associated infection, nosocomial infection, urinary tract infection, risk factors, CAUTI

INTRODUCTION

Healthcare-associated infections (HAIs) are recognized worldwide as a major public health concern, contributing significantly to both morbidity and mortality among hospitalized patients [1]. By definition, an HAI is a clinical infection that manifests after 48 hours of hospital admission, provided it was not present or incubating at the time of entry. These infections are usually caused by organisms endemic to the hospital environment and are often used as indicators of healthcare quality [2].

Urinary tract infection (UTI) is the most common type of nosocomial infection, accounting for nearly 35% of all reported cases [3]. Among these, over 80% are related to the use of indwelling urinary catheters, and are therefore categorized as catheter-associated urinary tract infections (CAUTIs) [3]. Globally, it is estimated that more than 100 million urinary catheters are inserted annually—equivalent to nearly 200 catheters every minute [4,5]. Around one in four hospitalized patients undergo catheterization, and although clinically necessary in many situations, this intervention remains the leading cause of hospital-acquired UTI [6]. Studies have shown that 75–80% of all nosocomial UTIs occur after catheter insertion [7]. In intensive care units (ICUs), CAUTI is particularly common due to prolonged hospital stays, frequent use of broad-spectrum antibiotics, multiple comorbidities, and a higher rate of invasive procedures. In developing countries, both the incidence of HAIs and the prevalence of antimicrobial resistance are reported to be three to five times higher than international benchmarks [8].

Several risk factors have been identified in the development of CAUTI. Duration of catheterization is one of the most significant, with infection risk increasing by approximately 5% with each additional day the catheter remains in place. Catheters may be classified as short-term (<28 days) or long-term (>28 days), with the latter associated with markedly higher risk. Female gender is another important factor, as the shorter urethra and its close anatomical relationship to the perineal area facilitate the entry of pathogens. In men, the risk rises after the age of 60, largely due to prostatic enlargement and incomplete bladder emptying. Other well-documented predisposing conditions include diabetes mellitus, chronic neurological and respiratory illnesses, and urological or nephrological disorders. Immunosuppression, such as with steroid therapy, further increases susceptibility [9,10].

Despite well-established preventive strategies-including limiting catheter use, adhering to aseptic insertion techniques, and maintaining appropriate catheter care-CAUTI continues to represent a major proportion of healthcare-associated infections. A detailed understanding of the relative importance of these risk factors is therefore essential to guide targeted interventions and reduce the burden on healthcare systems.

MATERIAL AND METHODS

Objective:
The primary aim of this study was to evaluate the association of symptomatic catheter-associated urinary tract infection (CAUTI) with various high-risk factors.

Ethical Consideration:
Approval of the Institutional Ethics Committee was obtained before starting the study. Informed written consent was taken from all the patients included in the study.

Study Design: Cross-sectional study

Study Duration: One year- October 2014 to September 2015

Sample Size: 100 patients

Study Group: Patients admitted to medical ICU and put on Foley's catheter

Place Of Study:
The study was conducted at the Institute of Microbiology, Madras Medical College in association with Medical ICU, Rajiv Gandhi Government General Hospital, Chennai.

Inclusion Criteria:
- Age ≥ 18years
- Patient admitted to IMCU and put on Foley's catheter.

Exclusion Criteria:
- Patients <18 years of age
- Patients catheterized prior to admission in ICU
- Those patients, whose Foley's catheter were removed or who were discharged/ expired before 3rd day of catheterization
- Those who were confirmed to have UTI on Day 1
- Pregnancy

Study Procedure:
Data were collected using a structured, predesigned questionnaire. Information included demographic details (name, age, sex, address, inpatient number, and admission date), presenting complaints, past medical and personal history, comorbidities, immunocompromised status, physical examination findings, and clinical diagnoses.The indication for Foley's catheterization was documented for every patient. Patients were diagnosed with symptomatic CAUTI based on established standard guidelines[11,12].

Letter to Editor

Antibiotic resistance and biofilm formation in *Klebsiella pneumoniae*: A global health threat

Dear Editor,

I am writing to commend and draw attention to the article titled "Evaluation of biofilm formation and carbapenem resistance in *Klebsiella pneumoniae* isolated from clinical samples at a rural hospital in western Uttar Pradesh" published in your esteemed journal in November 2024.[1] This work is of utmost interest to healthcare professionals and researchers alike as antimicrobial resistance has become a global health problem, and most of the multidrug-resistant organisms (MDROs) manifest biofilm formation.[2]

Klebsiella pneumoniae is one such organism that has demonstrated resistance to beta-lactamases, particularly Extended Spectrum β-Lactamases (ESBL) and carbapenemases, thus emerging as one of the MDROs responsible for difficult-to-treat cases. These bacteria have been implicated in several healthcare-associated infections. Their drug-resistant property has led to an increase in mortality and morbidity rates in hospital settings, resulting in an economic burden, including prolonged hospital stays and increased healthcare costs.[3]

The biofilm consists of communities of bacteria embedded in an extracellular matrix comprising proteins, exopolysaccharides, deoxyribonucleic acid (DNA), and lipopeptides. *K. pneumoniae* can produce a thick layer of extracellular biofilm that supports the bacterial attachment to living or non-living surfaces, this biofilm, thus, can hinder antibiotic penetration, reduces drug's effectiveness and contributes to multidrug resistance.[4,5] There are qualitative and quantitative methods to detect biofilm formation; additionally, advanced polymerase chain reaction (PCR)-based techniques have been performed for detecting biofilm-associated genes.[6] As found in several studies, including this one, 66% of the isolates were carbapenem-resistant based on the Kirby-Bauer disk diffusion method. Among them, New Delhi metallo-β-lactamase was the most common carbapenemase gene. (NDM). The correlation between biofilm formation and carbapenem-resistant *K. pneumoniae* (CR-KP) genes was found to be statistically significant in this study.

All the above findings highlight the severity of antimicrobial resistance in the present era. Not only does it limit the availability of commonly used antibiotics for the treatment, but it also emphasizes the need for alternative therapeutic approaches. This ultimately leads to complicating the treatment regimes, thereby increasing the healthcare costs. That day is not far when healthcare systems face a pre-antibiotic era-like situation due to untreatable infections.

The need of the present hour is not just knowledge but stringent hospital infection control practices and antimicrobial stewardship programs. Additionally, research on alternative therapies, such as anti-biofilm agents, is critical. In conclusion, a holistic approach to antimicrobial resistance is essential in combating this challenge.

Financial support and sponsorship
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Conflicts of interest
There are no conflicts of interest.

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Publications by the faculties in the Indexed Journals

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MIMER MEDICAL COLLEGE

DEPARTMENT OF MICROBIOLOGY

Newsletter October-December 2025

World Bioethics Day 2025 was celebrated with great enthusiasm on 14th October 2025 with speech presentation, skit performance & slogan competition. There was active participation from students of II MBBS CBME batch 2024-25.

Global Handwashing Day Celebration on 15th October, 2025 at Nanoli Zilla Parishad by Dr. Swati Sahai & Dr. Vidyagauri Gaikwad

Training session on Use of fire extinguisher -VRDL

Guest lecture - CRBSI: Preventing the Hidden Threat on the occasion of Infection Prevention Week by Dr. Jaishree Madhusudan Petkar, Professor and HOD, Department of Microbiology, PCMC Post Graduate Institute, YCM Hospital.

Mrs. Smita Watwe participated in poetry competition for World Bioethics Celebration

PG activity by Dr. Vidyagouri Gaikwad

World Antimicrobial Awareness Week 2025 celebration 2025- Student Seminar

Annual Research Conference 2025- paper presentation by Dr. Swati Sahai

WAAW celebration 2025: Collaborative Lecture

Publications by the faculties in the Indexed Journals and book chapter

Letter to the Editor

Candiduria: To treat or not to treat?

Dear Editor,

In present times, with increase in the number of people using urinary catheters and antibiotics, finding *Candida* in urine has become increasingly common, but knowing when to treat it, is still a confusing and important issue for clinicians. To begin with, candiduria refers to the presence of *Candida* species in the urine. The most frequent species isolated is *Candida albicans* followed by non-albicans *Candida* such as *C. glabrata, C. tropicalis*, and *C. krusei*. Recent epidemiological trends suggest a paradigm shift toward the predominance of non-albicans *Candida* species that often display reduced susceptibility to azoles.[1-3]

However, the everlasting question remains "*Should candiduria be treated*?" The answer is simple yet debatable. The critical step is distinguishing colonization from infection. Colonization can occur due to contamination during sample collection or asymptomatic colonization of the urinary tract whereas, true infection is associated with host response. To distinguish the two scenarios is often a major challenge for the clinicians. Asymptomatic candiduria is usually benign and does not require treatment in the absence of high-risk conditions. In contrast, symptomatic candiduria often presents with signs of urinary tract infection (UTI) and significant particularly in immunocompromised individuals or those with underlying urological abnormalities. Additionally, candidemia may occasionally originate from a urinary source, especially in high-risk individuals.[3,4]

The diagnostic modalities rely mainly on urine culture and its role cannot be undermined. Microscopy and quantitative culture help assess fungal load, while repeat cultures and clinical correlation remain essential for an accurate diagnosis and treatment. A single positive culture cannot be considered definitive. In selected cases, blood culture, imaging, or ultrasound may be required to exclude systemic involvement or obstructive pathology.

So, when should candiduria be treated? The decision must be individualized. According to the Infectious Diseases Society of America (IDSA) guidelines, treatment is recommended in the scenarios such as symptomatic UTI, neutropenia, low birth weight neonates, and patients undergoing urologic procedures.[3,5] In patients with indwelling catheters and asymptomatic candiduria, removal of catheter often suffices. Fluconazole remains the drug of choice due to its urinary excretion, though resistance in non *albicans* species necessitates alternative agents such as amphotericin B or echinocandins.[1,3] For example, Deng *et al.*[6] described a patient with asymptomatic candiduria caused by *Candida glabrata*. Despite repeated positive urine cultures, the patient exhibited no clinical symptoms, and invasive disease was excluded. Management without systemic antifungal therapy, combined with careful clinical monitoring, led to resolution. This case highlights the importance of distinguishing colonization from true infection and supports the principle of avoiding unnecessary antifungal treatment when candiduria is incidental.

In summary, the management of candiduria requires careful clinical judgement that integrates microbiological results, patient risk factors, and symptomatology. Overuse of antifungals in colonized patients increases costs and resistant pressure, especially among non-*albicans Candida* species. The guiding principle remains "treat the patient, not the culture." Future research should focus on the rapid diagnostic tools and local resistance surveillance to refine treatment strategies and optimize patient outcomes.

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Conflicts of interest
There are no conflicts of interest.

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To,
Dear Swati Sahai

This certificate confirms that **Swati Sahai** is the author of book chapter titled **"Microbial Biofilms and Antimicrobial Resistance: Challenges and Innovative Therapeutic Interventions"** of published book entitled **"Research in Microbiology (Volume - 14)"** having ISBN **978-93-7150-372-3**.

Yours Sincerely,

Brij Mohan Gupta
Manager
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