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3rd European Congress of Health Sciences

July 6-7, 2024 – Bristow, VA / USA (ONLINE)
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Oral Presentations



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Oral Presentation-1

Oxalate Diet Trial in Recurrent Calcium Oxalate Kidney Stone Formation

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ABSTRACT

We present a case of a 40-year-old man with recurrent calcium oxalate nephrolithiasis who opted for a dietary oxalate restriction trial alongside standard preventive measures. This report details his experience, highlighting the potential benefits and challenges of this approach, and encouraging a nuanced, individualized perspective on oxalate-restricted diets for kidney stone prevention.

CASE PRESENTATION

A 40-year-old male with a history of recurrent calcium oxalate kidney stones, despite standard preventive measures like increased fluid intake and citrate-rich foods, presented for dietary counseling. He experienced significant discomfort and disruption to his life due to past episodes and desired a proactive approach to manage his condition. Following comprehensive dietary assessment and analysis of his current stone composition, a personalized oxalate-restricted diet (100-150mg oxalate/day) was implemented. This entailed:

Limiting high-oxalate foods: Reducing intake of nuts, seeds, chocolate, rhubarb, spinach, and certain berries.

Replacing high-oxalate with low-oxalate alternatives: Choosing alternative vegetables, fruits, and starches.

Maintaining adequate calcium intake: Ensuring sufficient calcium consumption through dairy products or supplements.

Optimizing fluid intake: Continuing increased water consumption.

The patient meticulously followed the prescribed diet for six months, documenting his food intake and monitoring for any adverse effects. During this period, he had no further stone episodes and reported improved overall well-being and reduced anxiety surrounding potential stone recurrence.



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Oral Presentation-2

Infertility and Depression

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ABSTRACT

The journey through infertility can be profoundly isolating and emotionally challenging. Beyond the physical struggles, individuals and couples navigating infertility often grapple with a debilitating shadow: depression. This letter sheds light on the complex interplay between infertility and depression, advocating for increased awareness, supportive interventions, and comprehensive mental health care within fertility treatment programs. The emotional strain of infertility is multifaceted. Unfulfilled desires for parenthood, feelings of inadequacy and failure, social stigma, and financial stress can all converge to create a fertile ground for depression. The uncertainty and emotional rollercoaster associated with fertility treatments further exacerbate these challenges, amplifying feelings of vulnerability and despair.

Studies reveal a bidirectional relationship between infertility and depression. Individuals with depression are more likely to experience infertility, while infertility itself can significantly increase the risk of depression. This intricate link underscores the importance of a holistic approach that acknowledges and addresses both the emotional and physical aspects of infertility. Integrating mental health support into fertility treatment programs is crucial. Offering readily accessible psychological counseling, support groups, and mindfulness practices can equip individuals and couples with coping mechanisms and emotional resilience. Normalizing the emotional challenges of infertility through open communication and supportive environments can alleviate feelings of isolation and foster a sense of community. Furthermore, healthcare providers within fertility clinics need to be equipped to recognize and address the signs of depression. Routine screening and assessment tools can help identify individuals at risk, allowing for timely intervention and personalized support. Collaborations with mental health professionals can further strengthen the care provided within fertility settings. Research efforts focused on understanding the complex mechanisms underlying the link between infertility and depression are essential for developing more effective interventions. Exploring the role of social support, coping strategies, and mindfulness practices in mitigating depressive symptoms can significantly advance the field.

In conclusion, the emotional weight of infertility cannot be ignored. Recognizing the high prevalence of depression and its detrimental impact on both mental and physical well-being is the first step towards providing comprehensive care. By integrating mental health support into fertility treatment programs, fostering open communication, and investing in research, we can navigate the intertwined shadows of infertility and depression, empowering individuals and couples to navigate their journey with hope and resilience.



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Oral Presentation-3

Social Psychology of COVID-19 Pandemics

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ABSTRACT

The COVID-19 pandemic, an unprecedented global event, has not only reshaped healthcare landscapes but also profoundly impacted the social psyche. Understanding the complex shifts in collective and individual behaviors, anxieties, and resilience forms a crucial lens through which we can comprehend and navigate the long-lasting psychological and societal consequences of this era. The pandemic's initial wave unleashed a whirlwind of fear, uncertainty, and grief. Lockdowns and social distancing measures, while necessary for public health, fostered feelings of isolation, loneliness, and loss of control. Fear of the unknown virus, misinformation, and economic anxieties further amplified these emotional burdens.

However, amidst the shadows emerged beacons of resilience and solidarity. Communities rallied to support one another, healthcare workers became frontline heroes, and innovations in technology bridged gaps in physical connection. Witnessing acts of selflessness and collective action offered a counterpoint to the prevailing negativity, igniting a sense of hope and shared humanity. As we transition to a post-pandemic world, the social psyche continues to grapple with the residual effects. Long-term impacts like post-traumatic stress disorder, increased mental health issues, and evolving societal anxieties require ongoing attention and support. Addressing these challenges demands a multi-pronged approach. Firstly, investing in accessible mental health care services, including therapy and peer support groups, is paramount. Fostering open dialogue about the emotional and psychological burden of the pandemic can normalize help-seeking behavior and promote mental well-being. Secondly, rebuilding trust in information sources and combating misinformation remain crucial. Thirdly, fostering social cohesion and community engagement is essential for healing and collective resilience. Encouraging volunteering, community events, and initiatives that celebrate cultural diversity can strengthen social bonds and provide a sense of belonging. Furthermore, research focusing on the long-term psychological and societal impacts of the pandemic is crucial for informing interventions and promoting holistic well-being. Understanding the evolving needs of different populations and developing culturally sensitive, evidence-based approaches will be key to navigating the psychological landscape of the post-pandemic era.

In conclusion, the COVID-19 pandemic has unmasked the complexities of the social psyche, revealing its vulnerabilities and strengths in the face of a global crisis. Recognizing the enduring psychological and societal consequences, embracing ongoing support, and fostering research will be our collective compass as we navigate the shadows and light of this transformative era. By nurturing resilience, prioritizing mental health, and rebuilding trust, we can emerge from this pandemic stronger, more connected, and prepared to weather future challenges as a united human community.



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Oral Presentation-4

The ER Psyche

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ABSTRACT

The Emergency Room (ER) pulsates with a unique energy, a frenetic blend of urgency, adrenaline, and human drama. Amidst this controlled chaos, healthcare workers navigate a demanding terrain, confronting illness, injury, and death with unwavering dedication. Yet, behind the stethoscopes and scrubs lies a complex landscape of the ER psyche, shaped by constant pressure, exposure to trauma, and the unwavering need for compassion. This letter delves into the psychological realities of those who stand guard at the frontline of healthcare, urging greater recognition and support for their mental well-being. The ER environment presents a potent cocktail of stressors. High-stakes decisions made under time pressure, witnessing suffering and loss on a daily basis, and grappling with moral dilemmas can take a toll on emotional resilience. Witnessing traumatic events, from violent accidents to unexpected deaths, can leave lingering scars, increasing the risk of post-traumatic stress disorder (PTSD) and burnout.

However, the ER psyche is not solely defined by these challenges. It is also woven with remarkable resilience and compassion. ER workers develop coping mechanisms – dark humor, gallows jokes, shared stories – to navigate the emotional terrain. The camaraderie forged in the crucible of emergencies fosters a sense of belonging and shared purpose, empowering them to confront adversity together. Despite these coping mechanisms, the long-term effects of chronic stress and exposure to trauma cannot be ignored. Recognizing the unique mental health needs of ER workers is crucial. Providing access to confidential mental health services, including trauma-informed therapy and peer support groups, can equip them with tools to manage stress, process emotions, and prevent burnout. Furthermore, fostering a supportive work environment within the ER is essential. Encouraging open communication, creating opportunities for debriefing and emotional release, and implementing flexible work schedules can significantly contribute to well-being. Additionally, promoting self-care practices – healthy eating, exercise, and relaxation techniques – empowers individuals to safeguard their mental and physical health. Research exploring the specific psychological challenges faced by ER workers and evaluating the effectiveness of different interventions holds immense promise. Understanding the underlying mechanisms of resilience and developing evidence-based approaches can optimize support and empower ER workers to thrive in their demanding roles.

In conclusion, the ER psyche is a tapestry woven with resilience, compassion, and the inevitable toll of confronting human suffering at its rawest. Recognizing the unique mental health needs of these frontline heroes, providing dedicated support, and fostering research are critical steps to ensure their well-being and sustain their unwavering dedication to saving lives. By empowering the ER psyche, we empower the very heart of emergency healthcare, ensuring its strength and compassion for generations to come.



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Oral Presentation-5

Satisfaction and Expectance about MRI Experiences: A Questionnaire-Based Study

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ABSTRACT

Magnetic resonance imaging (MRI) is a commonly utilized diagnostic tool, yet patient satisfaction and expectations regarding the experience can vary greatly. This study aimed to assess patient satisfaction and expectations related to different aspects of the MRI experience, identify factors influencing satisfaction, and compare patients' pre- and post-examination expectations. A cross-sectional study was conducted at a secondary care hospital in India. Two hundred consecutive patients undergoing MRI examinations were invited to participate. A self-administered questionnaire assessed pre-examination expectations regarding information provision, wait times, procedure explanation, and pain management. After the examination, participants completed a satisfaction questionnaire evaluating the same aspects, along with perceived quality of care and overall satisfaction. The mean overall satisfaction score was 4.12 (out of 5), with information provision having the highest satisfaction (4.25) and wait times the lowest (3.87). Significant differences were observed between pre- and post-examination expectations for all aspects except quality of care, suggesting that the actual experience influenced how patients perceived various aspects of the MRI procedure. Factors like clear explanation of the procedure, shorter wait times, and effective pain management were significantly associated with higher satisfaction. Our findings highlight the importance of comprehensive pre-examination information, minimizing wait times, and effective pain management for improving patient satisfaction with MRI experiences. Addressing unmet expectations through enhanced communication and patient-centered care can further improve satisfaction and reduce anxiety associated with MRIs.



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Oral Presentation-6

SARS-CoV-2 Mutations

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ABSTRACT

The emergence and dynamic evolution of SARS-CoV-2 have challenged healthcare systems worldwide, demanding continuous adaptation in clinical management and public health strategies. At the forefront of this challenge lies the intricate story of viral mutations, constantly shaping the pandemic landscape. This letter aims to navigate the labyrinth of SARS-CoV-2 mutations, highlighting their impact on viral fitness, transmission, and vaccine efficacy while underscoring the need for sustained surveillance and research. Mutations are inherent to viral replication, and SARS-CoV-2 is no exception. Some mutations result in neutral changes, while others can significantly impact viral characteristics. Point mutations in specific genetic regions, particularly the Spike protein, can enhance transmissibility, immune evasion, or resistance to antivirals.

The emergence of variants of concern (VOCs) like Alpha, Delta, and Omicron has vividly demonstrated the impact of mutations. VOCs often exhibit increased transmissibility, leading to surges in cases and straining healthcare resources. Additionally, some VOCs can partially evade the immune response induced by vaccination or prior infection, necessitating adjustments in vaccine booster strategies and public health measures. However, not all mutations pose significant threats. Understanding the functional consequences of mutations and their epidemiological spread is crucial for prioritizing public health interventions. Continuous genomic surveillance through large-scale sequencing efforts remains essential for tracking viral evolution and anticipating potential shifts in the pandemic dynamics. The emergence of Omicron and its subvariants further highlights the complex interplay between viral mutations and vaccine efficacy. While vaccines still offer significant protection against severe illness and death, their effectiveness in preventing breakthrough infections can be reduced by certain mutations. This underscores the need for continued research on variant-specific vaccine adaptations and the development of broadly protective vaccines encompassing diverse viral strains.

In conclusion, the story of SARS-CoV-2 mutations is far from over. Navigating this labyrinth demands a multifaceted approach: Sustained genomic surveillance: To track viral evolution and identify emerging threats. Functional characterization of mutations: To understand their impact on viral fitness and public health implications. Adaptation of vaccine strategies: To develop variant-specific boosters and broadly protective vaccines. Collaboration and knowledge sharing: To foster international cooperation in research and public health measures. By embracing vigilance, research, and collaboration, we can navigate the evolving labyrinth of SARS-CoV-2 mutations and effectively manage the ongoing pandemic, building resilience towards future viral threats.



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Oral Presentation-7

Case Report: Nitrofurantoin-Induced Vomiting

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ABSTRACT

Nitrofurantoin, a commonly used antibiotic for urinary tract infections (UTIs), can, in rare cases, induce significant nausea and vomiting. We present a case of a 30-year-old woman who developed intractable vomiting shortly after initiating nitrofurantoin therapy for a UTI. This report highlights the importance of considering nitrofurantoin as a potential cause of vomiting in patients with recent antibiotic use, even in the absence of typical gastrointestinal side effects.

INTRODUCTION

Nitrofurantoin is generally well-tolerated, with the most common side effects being nausea, dyspepsia, and abdominal pain. Severe vomiting, though uncommon, has been reported as a potential adverse reaction, particularly in women and with higher doses. The exact mechanism of nitrofurantoin-induced vomiting remains unclear, but it is thought to involve irritation of the gastric mucosa and central nervous system effects on the vomiting reflex (1-5).

CASE PRESENTATION

A 30-year-old woman with a history of recurrent UTIs presented with dysuria, frequency, and urgency of urination. Urinalysis confirmed a UTI, and she was prescribed nitrofurantoin 100mg four times daily. Within 8 hours of taking the first dose, she developed severe nausea and projectile vomiting, leading to dehydration and electrolyte imbalance. She denied fever, diarrhea, or abdominal pain. She had no known allergies or recent food intolerances.

Her past medical history was unremarkable except for the recurrent UTIs. She did not take any regular medications or herbal supplements. On examination, she was afebrile with stable vital signs. Physical examination revealed dehydration but no abdominal tenderness or organomegaly.

Laboratory tests revealed mild hyponatremia and hypokalaemia due to dehydration from vomiting. Other biochemical and hematological investigations were within normal limits. A repeat urinalysis confirmed the UTI, with no evidence of other pathogens or complications.

Given the temporal association between nitrofurantoin initiation and vomiting, and the absence of other likely causes, a diagnosis of nitrofurantoin-induced vomiting was suspected. Nitrofurantoin was immediately discontinued, and supportive care with intravenous fluids and antiemetics (ondansetron) was initiated.

The patient's symptoms gradually improved over the next 24 hours, and she was discharged home with instructions to avoid nitrofurantoin and complete her UTI treatment with a different antibiotic (fosfomycin). She made a full recovery and did not experience any further vomiting episodes.

CONCLUSION

While nitrofurantoin remains a valuable medication for treating UTIs, its potential for inducing severe vomiting should not be underestimated. Close attention to symptom presentation, timely diagnosis, and prompt discontinuation of the drug are essential for optimal patient care and preventing complications. By promoting awareness and vigilance, we can ensure the safe and effective use of this important antibiotic in managing UTIs.



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Oral Presentation-8

Mobbing of Healthcare Workers by Patients

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ABSTRACT

Healthcare workers are the backbone of our medical system, providing vital care to patients in often challenging and stressful environments. However, in recent years, they have increasingly faced a disturbing trend: mobbing by patients. This letter aims to shed light on this growing issue, highlighting its detrimental impact on both patient care and healthcare worker well-being, and calling for concerted action to address it.

Mobbing, defined as persistent negative behavior towards an individual or group with the intent to humiliate, isolate, or intimidate, can manifest in various ways in healthcare settings. It may involve verbal abuse, threats, physical aggression, excessive demands, or unreasonable complaints. These behaviors can create a hostile work environment, leading to:

- Decreased job satisfaction and morale among healthcare workers.
- Increased stress, anxiety, and burnout.
- Impaired decision-making and potential errors in patient care.
- Higher staff turnover rates, impacting continuity of care.
- Deterioration in the overall quality of healthcare services.

The factors contributing to patient mobbing are complex and multifaceted. They may include: Increased patient wait times and dissatisfaction with healthcare services. Misinformation and unrealistic expectations fueled by social media. Lack of understanding of the challenges and pressures faced by healthcare workers. Personal frustrations and anxieties related to illness or medical treatment. Addressing this issue requires a multi-pronged approach: Raising awareness among healthcare workers, patients, and the public about mobbing and its negative consequences. Implementing clear policies and protocols for reporting and addressing incidents of mobbing. Providing healthcare workers with training on de-escalation techniques and coping mechanisms for dealing with difficult patients. Improving communication and transparency within healthcare systems to address patient concerns and manage expectations effectively. Investing in resources to reduce wait times and improve access to quality healthcare services. Supporting research to better understand the root causes of patient mobbing and develop effective interventions.

Mobbing of healthcare workers by patients is not simply a workplace issue; it is a serious threat to the entire healthcare system. By acknowledging its prevalence, understanding its causes, and taking decisive action to address it, we can create a safer and more respectful environment for both healthcare workers and patients, ultimately promoting better healthcare outcomes for all.



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Oral Presentation-9

Physical Activity and Depression

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ABSTRACT

Depression, a debilitating mental health condition impacting millions globally, casts a long shadow over well-being. While pharmacological and therapeutic interventions remain crucial, recent research reveals a powerful, accessible, and often overlooked ally in the fight against depression: physical activity. This letter explores the intricate link between movement and mood, advocating for the integration of physical activity into comprehensive depression management strategies. The evidence is compelling. Numerous studies demonstrate the positive impact of physical activity on depression symptoms. Engaging in regular exercise, regardless of intensity or duration, has been shown to reduce depressive symptoms, improve mood, and enhance overall mental well-being. The mechanisms underlying this beneficial effect are multifaceted, ranging from neurochemical changes in the brain to improved self-esteem and social interaction.

For individuals struggling with depression, the prospect of initiating or maintaining physical activity can feel daunting. However, emphasizing small, attainable goals and gradual increases in activity level can pave the way for sustainable change. Encouraging enjoyable activities like walking, swimming, or dancing, and fostering a supportive environment like group exercise classes, can further enhance motivation and adherence. The benefits of physical activity extend beyond symptom reduction. Regular exercise can prevent depression relapse, improve long-term mental health outcomes, and contribute to overall physical health. This makes it a valuable part of comprehensive depression management strategies alongside other evidence-based interventions. However, integrating physical activity into depression care requires a collaborative approach. Healthcare professionals need to be equipped to assess physical activity levels, provide tailored exercise recommendations, and address potential barriers to participation. Collaboration with physical therapists, exercise specialists, and community-based programs can further strengthen patient support and promote long-term success. Furthermore, research efforts focused on optimizing exercise interventions for diverse populations with depression, understanding the underlying mechanisms of action, and exploring the potential of technology-based solutions to support physical activity can significantly advance the field.

In conclusion, the role of physical activity in alleviating depression and promoting mental well-being is undeniable. By raising awareness, integrating exercise into treatment plans, and fostering a supportive environment, we can empower individuals to step towards hope, one movement at a time. In doing so, we can add a powerful tool to the mental health toolbox, contributing to a future where depression's shadow is eclipsed by the light of well-being.



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Oral Presentation-10

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Efeitos in vitro da terapia fotodinâmica e fotossensibilizador (azul de metileno) em
Stenotrophomonas maltophilia

(Effects in vitro of photodynamic therapy and photosensitizer (methylene blue) on
Stenotrophomonas maltophilia)

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Oral Presentation-10 (*continue*)

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Resumo

Infecções relacionadas a cuidados de saúde apresentam-se como problemática constante para a saúde pública mundial. Os aumentos de morbimortalidade, tempo de internação e custos hospitalares, são impactos causados pela crescente prevalência de microrganismos resistentes a antimicrobianos. A *Stenotrophomonas maltophilia*, por possuir resistência bacteriana intrínseca a antibióticos habitualmente utilizados, tem se mostrado como importante causadora de graves infecções hospitalares. Nesse contexto, a utilização de terapia fotodinâmica (TFD), caracterizada pela utilização de um agente fotossensibilizador e fonte de luz específica, com intuito de gerar espécies reativas de oxigênio no meio inserido, tem se mostrado eficaz como alternativa antimicrobiana no controle de crescimento de bactérias encontradas em ambiente nosocomial. Objetivou-se, através da análise *in vitro* de *S. maltophilia*, o impacto de tal terapia sob culturas, sendo comparadas a grupo controle, exposição ao fotossensibilizador e apenas à fonte de luz. Variou-se em relação a tempo de exposição com manutenção de energia e comprimento de onda utilizado. Evidenciou-se controle eficaz de replicação bacteriana além de efeito bactericida expressivo, com redução em cerca de 90% da quantidade de unidades formadoras de colônias (UFC), principalmente quando comparados ao grupo controle. Além disso, foi evidenciado o aumento em UFC's quando expostas apenas à luz, estimulando o processo enzimático, demonstrando a necessidade da utilização de fotossensibilizador como substância produtora de moléculas instáveis responsáveis por efeito antimicrobiano. Assim, a partir dos resultados obtidos *in vitro* associados a propriedades físico-químicas, manejo e disponibilidade, a utilização da TFD como agente antimicrobiano tem ganhado cada vez mais importância e relevância clínica.

Palavras-chave: *Stenotrophomonas maltophilia*; Fotoquimioterapia; Agente antimicrobiano



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Abstract

Healthcare-related infections are a constant problem for global public health. Increases in morbidity and mortality, length of stay and hospital costs are impacts caused by the growing prevalence of microorganisms resistant to antimicrobials. *Stenotrophomonas maltophilia*, as it has intrinsic bacterial resistance to commonly used antibiotics, has been shown to be an important cause of serious hospital infections. In this context, the use of photodynamic therapy (PDT), characterized by the use of a photosensitizing agent and a specific light source, with the aim of generating reactive oxygen species in the inserted medium, has proven to be effective as an antimicrobial alternative in controlling the growth of bacteria founded in nosocomial environments. The objective was, through *in vitro* analysis of *S. maltophilia*, the impact of such therapy on cultures, being compared to a control group, exposure to the photosensitizer and only to the light source. It varied in relation to exposure time with energy maintenance and wavelength used. There was an effective control of bacterial replication in addition to a significant bactericidal effect, with a reduction of approximately 90% in the number of colony forming units (CFU), especially when compared to the control group. Furthermore, an increase in CFU's was evidenced when exposed only to light, stimulating the enzymatic process, demonstrating the need to use a photosensitizer as a substance that produced unstable molecules responsible for an antimicrobial effect. Thereby, based on the results obtained *in vitro* associated with physical-chemical properties, management and availability, the use of PDT as an antimicrobial agent has gained increasingly more importance and clinical relevance.

Key-words: *Stenotrophomonas maltophilia*; Photochemotherapy; Anti-Infective Agents

1. Introdução

Unidades hospitalares que prestam assistência de saúde a pacientes críticos e gravemente enfermos, geralmente, apresentam-se com as maiores taxas de infecções relacionadas a cuidados de saúde. Tal fato é justificado pelo uso de múltiplos dispositivos assistenciais (cateter vesical, dreno de tórax, acessos venosos) associados à capacidade imunológica reduzida dos próprios pacientes.¹

Além de aumentar custos de assistência ao doente e prolongar tempo de internação, tais complicações aumentam de forma substancial a morbimortalidade, além de predispor a elevado risco de infecções por patógenos diversos, havendo necessidade do uso em larga escala de diversos antimicrobianos.^{1,2}

O uso de antibióticos de forma não racional, principalmente em pacientes críticos, gera o aumento da prevalência de bactérias multirresistentes. Considerando o escasso arsenal terapêutico atual, o aumento da incidência de tais microrganismos tem representando importante impacto na qualidade da assistência à saúde. Dados americanos demonstram que cerca de dois milhões de indivíduos são infectados por tais, havendo mortalidade em cerca de 30 mil destes.¹⁻³

Nesse contexto atual, nota-se que a *Stenotrophomonas maltophilia* apresenta-se como patógeno de grande relevância clínicas e epidemiológica devido a características intrínsecas. Bactéria aeróbia não fermentadora, que assume formato de bacilo gram-negativo, é considerada importante patógeno oportunista recentemente descoberto e até então negligenciado quanto a sua patogenicidade.⁴



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A presença de genes codificadores de proteínas líticas de antibióticos associado a canais de efluxo e baixa permeabilidade de antimicrobianos, além da formação de biofilmes, garantem resistência e baixa suscetibilidade à mecanismos de controle microbiano à tal bactéria. Somado a isso, morfologicamente é composta por polissacarídeos em sua membrana externa que garante aderência adicional a superfícies de materiais existentes em abundância em locais de assistência à saúde.⁴⁻⁶

Apesar de apresentar-se com baixa patogenicidade quando comparado a outras bactérias existentes em ambientes hospitalares, como por exemplo, *Pseudomonas aeruginosa*, assume característica multirresistente devido à resistência intrínseca a moléculas antimicrobianas discutidas acima. Em contexto clínico de infecção clínica causada por tal, a disponibilidade de terapias torna-se escassa com elevada morbimortalidade.⁵⁻⁷

Epidemiologicamente, bacteremia relacionado a uso de cateter venoso central e pneumonia associado à ventilação mecânica invasiva, são as condições clínicas mais frequentes relacionados à *S. maltophilia*. Outras síndrome clínicas menos frequentes são infecções de feridas (úlceras por pressão), infecções do trato urinário associado a sondagem vesical, endocardites, entre outras.

Tais condições apresentam-se com incidência elevada e maior morbimortalidade em pacientes extremos de idade, imunossuprimidos, exposição prévia a carbapenêmicos, ventilação mecânica invasiva, uso de dispositivos invasivos por tempo prolongado além da própria permanência em unidade de terapia intensiva.⁸⁻¹¹

Estudos de prevalência demonstram isolamento frequente de tal bactéria em equipamento de hemodiálise, nebulizadores, sistemas de ventilação mecânica, cateter venoso central e mãos de profissionais assistentes. Muitas colônias, quando cultivadas *in vitro*, demonstraram elevada frequência de resistência à antibióticos usualmente utilizados, como o sulfametoxazol associado a trimetropim e levofloxacino.¹¹⁻¹³

Assim, considerando tendência de crescimento exponencial da prevalência de tal bactéria em ambiente hospitalar associado a escassez de recursos terapêuticos, o desenvolvimento de formas alternativas para controle bacteriano, principalmente sob forma de esterilização de materiais e superfícies inanimadas, se faz extremamente necessário. Assumir características bactericidas e inibir o crescimento assumem fundamental importante já que quanto menor o tempo de exposição com maior impacto, maior eficácia.

A produção de moléculas instáveis que possam interagir com componentes de membrana plasmática de bactérias ou estruturas intracelulares tem sido foco principal de medidas antimicrobianas. Tais moléculas, especialmente espécies reativas de oxigênio, são inócuas a seres procariontes, como as bactérias, já que não possuem recursos para impedirem sua formação, com isso gerando lesão e destruição celular.¹⁴⁻¹⁵

Com base no conceito da indução na formação de espécies reativas de oxigênio como mecanismo citotóxico, a terapia fotodinâmica apresenta-se como antimicrobiano promissor. O uso de um componente fotossensibilizador, quando estimulado por fonte de luz irradiante, produz tais moléculas instáveis é o processo bioquímico envolvido em tal processo.¹⁶⁻¹⁷



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O efeito bactericida e bacteriostático de tal terapia foi demonstrado por diversos estudos, havendo eficácia variável de acordo com maior tempo de exposição à terapia, tempo exposto ao fotossensibilizador e quantidade de luz irradiada. Além do efeito antimicrobiano, há evidências científicas favoráveis sobre efeito tópico em lesões oncológicas locais devido a efeito imunomodulador, melhorando condições inflamatórias locais.¹⁸⁻¹⁹

Com base nesse contexto de importância clínica e epidemiológica, é evidente a necessidade de buscar alternativas para controle antimicrobiano. Com isso, objetivou-se analisar o efeito bacteriostático e bactericida da terapia fotodinâmica sob colônias de *Stenotrophomonas maltophilia* cultivadas *in vitro*.

2. Materiais e Métodos

2.1 Bactérias

Foram utilizadas cepas padrão de *Stenotrophomonas maltophilia* isoladas previamente de laboratórios (ATCC 17666– American Type Culture Collection), sendo revitalizadas em ágar sangue e caldo tioglicolato, incubadas a 35°C por até 48 horas em ambiente/estufa bacteriológica. Após cultivo, foram expostas à inativação fotodinâmica.

2.2 Inativações fotodinâmica

Para inativação fotodinâmica foi utilizado o fotossensibilizador (Fs) azul de metileno, utilizado na concentração de 0,1 mg/ml para cada amostra. O azul de metileno foi dissolvido em água bidestilada estéril, e filtrado em membrana estéril (Millipore, São Paulo, Brasil).

A fonte de luz utilizada foi o laser com comprimento de onda de 660 nm, densidade de energia de 26,3 J/cm², energia de 10 J, potência 100 mW. Utilizados os tempos de 05, 10, 15, 20 e 25 minutos de irradiação numa área de 0,56 cm², gerando uma irradiação de 178,6 mW/cm².

As linhagens bacterianas cultivadas em meio caldo tioglicolato, após prazo de 48 horas à 35°C, foram centrifugadas por 1000g por 10 min. O sobrenadante desprezado e o pellet ressuspensionado em solução estéril de NaCl (0,5%) e centrifugado novamente, sendo repetido cinco vezes. O pellet obtido finalmente foi ressuspensionado em 1mL de solução estéril de NaCl 0,5%. Posteriormente, a partir da suspensão de 10⁶ células/mL de células viáveis foram realizados os ensaios. Utilizou-se cerca de 4.10⁶ células/mL para cada grupo, no momento inicial.

Esses ensaios foram divididos em quatro grupos experimentais: Grupo L- / F- (não irradiado com laser vermelho e ausência de azul de metileno), sendo este o grupo controle, Grupo L- / F+ (não irradiado com laser vermelho e presença de azul de metileno), Grupo L+ / F- (irradiado com laser vermelho e ausência de azul de metileno), L+ / F+ (irradiado com laser vermelho associado ao azul de metileno).



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A amostra microbiana dos grupos L-/F- e L+/F- foram constituídas de 1,0mL da suspensão bacteriana e 0,05mL de solução fisiológica. As amostras microbianas dos grupos L-/F+ e L+F+ constituídos 1,0mL da suspensão bacteriana e 0,05mL de solução de azul de metileno. Após a preparação, os microrganismos permaneceram por 15 min a 35 °C incubadas com em ambiente escuro e em seguida irradiadas ou não com laser vermelho. A solução de azul de metileno estava na concentração de 1mg/mL.

A cada ciclo de cinco minutos, totalizando 25 min, foi removida uma alíquota de 0,1mL e cultivadas em meio ágar Sangue para cultivo de *Stenotrophomonas maltophilia*. As suspensões bacterianas foram uniformemente distribuídas e incubadas a 35 °C por 24 horas. Em seguida foi realizado a contagem das unidades formadoras de colônias (UFCs) e os resultados foram expressos em log.

3. Resultados e Discussão

Os resultados obtidos após exposição de colônias de *S. maltophilia* à terapia fotodinâmica, fonte de luz ativadora de forma isolada e apenas ao fotossensibilizador azul de metileno, estão demonstrados no quadro 1.

Quadro 1. Contagem total de UFC/ml (Log10) de *S. maltophilia* após exposição à terapia fotodinâmica (TFD), ao laser isolado (Laser) e azul de metileno isolado (FS), em comparação ao grupo não exposto (Controle), com variação do tempo de exposição (minutos). Densidade de energia usada foi de 26,3 J/cm².

<i>S. maltophilia</i>	Tempo de exposição (Minutos)					
Grupos	0	5	10	15	20	25
L - / F – (Controle)	4,0	4,08	4,12	4,17	4,24	4,31
L - / F + (FS)	4,0	4,09	4,14	4,20	4,26	4,32
L + / F – (Laser)	4,0	4,90	5,60	6,50	7,80	9,20
L + / F + (TFD)	4,0	3,1	2,8	2,1	1,3	0,04

Fonte: Autoria própria.

Inicialmente, é possível evidenciar que a quantidade de contagem total de unidades formadoras de colônias (UFC) foi semelhante, nos quatro grupos, previamente ao início da exposição. A porcentagem em comparação ao nível inicial existente (próximo de 4.0 Log10) foi utilizado como um marcador de replicação bacteriana ou efeito bactericida e bacteriostático.



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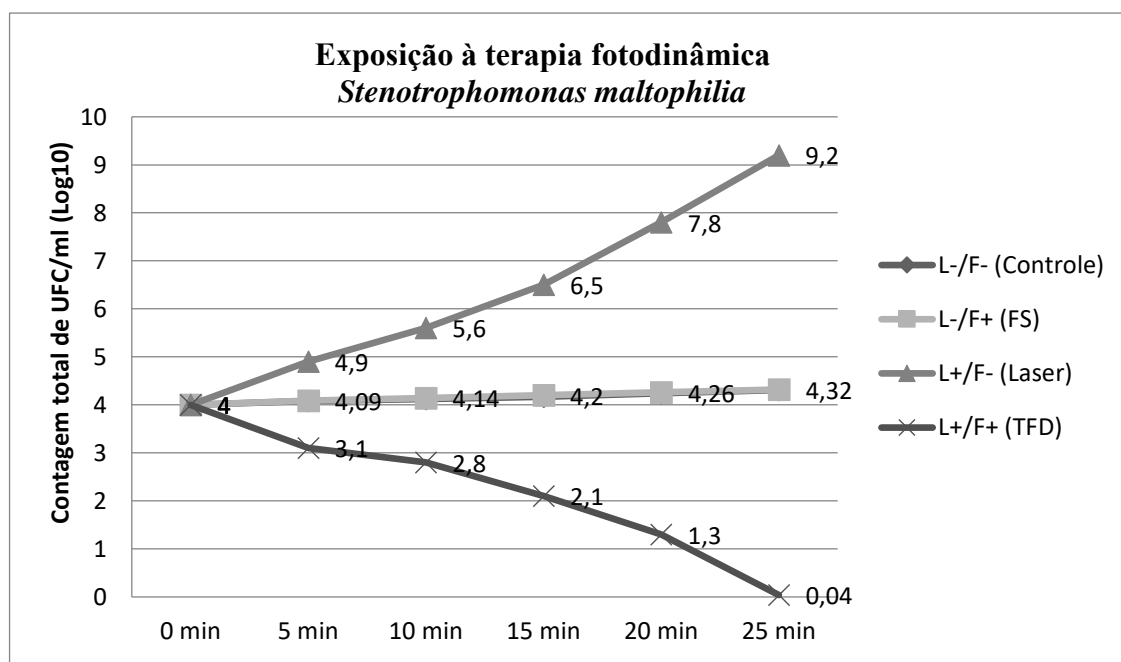
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Foi possível evidenciar que o crescimento bacteriano se manteve tanto no grupo controle quanto no uso de fotossensibilizador isolado, possuindo variabilidade de taxa constante em ambos. Tal resultado demonstra que, neste estudo, o azul de metileno não se apresentou como componente estimulador na proliferação do patógeno estudado.

Por outro lado, quando a *S. maltophilia* foi exposta apenas à fonte de luz, com densidade de energia usada de 26,3 J/cm² e comprimento de onda 660nm, houve aumento expressivo e exponencial quanto maior o tempo de exposição, assumindo aspecto de curva ascendente (gráfico abaixo). Logo no 5º minuto exposto, a quantidade de UFC aumentou cerca de 20% quando comparado ao grupo controle. A taxa de crescimento bacteriano se manteve em torno de 20% a cada cinco minutos comparados, atingindo cerca de 90% de aumento em relação ao 5º minuto.

Tal efeito, assim como evidenciado por diversos autores que utilizaram outras bactérias, pode ser explicado pelo efeito estimulador de metabolismo energético dependente de temperatura com favorecimento de reações enzimáticas. Contudo, tal estímulo ocorre até certo ponto, demonstrando não progressão na taxa de crescimento mesmo após aumento de tempo exposto.^{17, 20}

Figura 1. Gráfico comparativo entre contagem total de UFC/ml (Log10) de *S. maltophilia* após exposição à terapia fotodinâmica (TFD), ao laser isolado (Laser) e azul de metileno isolado (FS), em comparação ao grupo não exposto (Controle), com variação do tempo de exposição (minutos).



Fonte: Autoria própria.



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Por outro lado, quando utilizado o fotossensibilizador associado a emissão de luz, foi possível evidenciar a redução de cerca 99% da quantidade de unidades formadoras de colônias, demonstrando efeito bactericida importante. Além disso, outro ponto a ser destacado foi de que mesmo a curto tempo de exposição, notou-se que aos 5 minutos, quando comparado ao grupo controle, a redução de 25% na quantidade de colônias já pode ser observada.

A necessidade da utilização de substância fotossensibilizadora (azul de metileno) é ponto fundamental na terapia. Tal fato pode ser explicado pelo fato de ser o componente gerador de espécies reativas de oxigênio e outras moléculas instáveis, os quais irão reagir com componentes intracelulares de bactérias, exercendo efeito antimicrobiano.

O azul de metileno mostrou-se ser substância estável quando não irradiada, já que não foi evidenciado redução na formação de UFC's. Tal fato garante segurança na utilização em superfícies que devem ser preservadas, interagindo de forma nula com outros componentes.

Apesar de no 25º minuto apresentar-se com crescimento bacteriano, quando comparado ao grupo controle e aos outros grupos, nota-se que o efeito bacteriostático e bactericida foi relevante, principalmente à medida que se aumentava o tempo exposto. Apesar de não testado maior densidade de energia, possivelmente tal efeito pode ser otimizado, considerando resultados de outros autores.

Com isso, nota-se que tal método alternativo estudado demonstrou efeito antimicrobiano importante sob *Stenotrophomonas maltophilia* cultivadas e expostas *in vitro*. Estudos com terapia fotodinâmica têm se mostrado seguro e com ampla variabilidade de aplicação, possuindo vantagem financeira quando comparado à outros métodos mais sofisticados e dependentes de estudos clínicos a longo prazo. Além disso, com base na interação físico-química do método, o uso não induz seletividade bacteriana já que espécies reativas de oxigênios dependentes de aparato intracelular antioxidante para não causarem lesão celular, estando estes não desenvolvidos em seres procariontes.



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Oral Presentation-11

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The Effect of Awareness Training on Fear of Surgery

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ABSTRACT

Objective: This study was conducted to determine the effect of awareness training given to patients undergoing surgical intervention on surgical fear.

Materials and Method: The study was conducted as a pre-test-post-test one-group quasi-experimental model between May 2021 and August 2021. It was conducted in the General Surgery Department of a University Hospital in eastern Turkey. The research population consists of all adult patients who will undergo surgery in the General Surgery Service of the University Hospital. The sample of the study consisted of 219 patients selected from this population by random sampling method. Personal Information Form and Surgical Fear Scale were used to collect the data. Descriptive statistics and paired t test were used in the evaluation of the data.

Results: In the study, it was found that the mean surgical fear scores of the patients decreased after the training and there was a significant difference between the total scores of surgical fear before and after the training ($p<0.05$). There was a significant difference between the mean scores of surgical fear related to short-term and long-term outcomes before and after the training ($p<0.05$).

Conclusion: Awareness training given to patients undergoing surgical intervention was found to reduce surgical fear.

Keywords: Surgical fear, awareness training, nursing.

1.INTRODUCTION

Hospitalisation for illness, diagnosis and treatment often causes negative feelings. Since they cannot fulfil their responsibilities, individuals feel dependent and their lives are affected in many ways due to reasons such as uncertainty. However, anxiety and fears of patients increase (1,2,3). Surgical interventions that cause changes in the physiological functions of the patient affect the patient negatively in terms of physiological and psychological aspects, whether they are small, large, emergency or planned in terms of risk (4,5,6). Among these negative effects, the most common fear is experienced by patients in different degrees in the preoperative and postoperative periods. The fear experienced is seen depending on the surgical interventions the patient has undergone, the personal characteristics of the patient, and reasons such as pain that may occur in the postoperative period, disruption of body integrity, and uncertainty (6,7).

In addition to the surgical technique, the education given to the patient, patient preparation in the preoperative period and quality care applied to the patient after surgery affect the success of the surgical intervention. Patient education given by healthcare personnel in the preoperative period has been reported to reduce patient fear and anxiety (1,3,4). It has been reported that patients who did not receive preoperative education experienced psychological problems before and after surgical intervention and postoperative complications increased accordingly (8,9).



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Preoperative nursing care aims to inform the patient about the surgical intervention to be performed and to prepare the patient in the best way possible for the procedures to be performed. In the literature, it has been found that it is important to inform patients about this process before the surgical intervention in order to reduce the negative effects of fear and anxiety experienced by patients in relation to surgery (5,10,11). In preoperative education, the patient should be informed about the surgical procedure, surgical team members, and the physical characteristics of the operating theatre. Talking to the patient in a relaxing way while giving education, acting in a caring and tolerant manner are among the expectations of patients from nurses in the preoperative period (1).

It is among the responsibilities of surgical nurses to complete patient preparation for surgical intervention in a good way, to prevent complications that may occur, and to provide information about the surgical process. It has an important place in reducing the fear and anxiety experienced before surgery (4,5).

The aim of this study was to investigate the effect of preoperative information and awareness training about the operation and postoperative period on the level of surgical fear in patients who will undergo surgical intervention.

2.MATERIAL AND METHOD

2.1.Research model

The study was designed as a pretest-posttest one-group quasi-experimental model. This study was conducted in the General Surgery Service of the University Hospital between May 2021 and August 2021. The population of the study consisted of all adult patients who will undergo surgery in the surgical service. The sample size was determined by G Power 3.1.9.7 programme (12). According to the 0.7% effect size, 0.05 margin of error, 0.95% confidence interval, and 95% power analysis with 95% power to represent the population, 230 patients were determined. The sample included patients who met the inclusion criteria and were selected from the population by random sampling method. Nine patients who did not meet the inclusion criteria and 2 patients who did not accept to participate in the study were excluded from the study, and the study was completed with 219 patients.

The research data were collected by the researcher from all adult patients who were hospitalised in the surgical ward for at least 48 hours by face-to-face interview technique in patient rooms. Inclusion criteria: voluntary participation in the study, being an adult, not having any communication problem, not being diagnosed with psychiatric disease. Patients from whom permission to participate in the study could not be obtained and patients who did not fulfil the inclusion criteria were excluded from the study.

2.2. Data collection

Personal Information Form and Surgical Fear Scale were administered to the patients as pre-test before the operation. The patient was educated about the surgical intervention to be performed. After the patient education, the Surgical Fear Scale was applied as a post-test.



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Data collection in the study; In the first stage, which started with the hospitalisation of the patients before surgical intervention, the patients were informed about the study and their written and verbal permissions were obtained for their participation in the study. All patients who agreed to participate in the study were administered the Personal Information Form and Surgical Fear Scale as a pretest on the day before the surgical intervention. The responses of the patients were recorded by the researcher.

Awareness training given to patients before surgical intervention; preoperative waiting and postoperative recovery units, operating room, tables with surgical instruments, sterile drapes, surgical team members, as well as information to be obtained from the patients themselves when going to the operating theatre, positions to be given for surgical intervention and precautions to be taken, communication methods to be provided with patient relatives during surgery, interventions in the postoperative recovery unit and criteria for being sent to the ward. This information was given verbally by the researcher. All interviews and information were conducted in surgical wards, in the patients' rooms and by providing a suitable interview environment. This interview lasted approximately 30 minutes.

In the second stage of the data collection process, before the patients were sent from the ward to the operating theatre, the researcher asked the patients to answer the questions in the surgical fear scale again as a post-test, this interview lasted approximately 10 minutes. The research data were collected using the Personal Information Form and Surgical Fear Scale.

2.2.1. Personal Information Form: The form, which reports the sociodemographic characteristics and health status of the patients, was created by the researcher in line with the literature (9,10).

2.2.2. Surgical Fear Scale (SFS): It was developed by Theunissen et al. (13) to evaluate the fear levels of patients who would undergo surgical intervention, and its validity and reliability study was performed by Bağdigen and Özlü (14). The scale consists of 8 items with a numerical scale between 0-10. This scale, which consists of two sub-dimensions, shows the fear of short and long-term consequences of surgical intervention. Items 1-4 in the scale measure the fear of short-term consequences of surgical intervention, while items 5-8 measure the fear of long-term consequences of surgical intervention. The lowest score that can be obtained from the scale is 0 and the highest score is 80. High scores obtained from the surgical fear scale indicate high levels of fear. The Cronbach's Alpha coefficient of the scale is 0.76-0.92 for the original scale. For this study, the Cronbach's Alpha coefficient of the scale was found to be 0.96.

2.3. Data analysis

The data obtained in the study were analysed using the Statistical Package for Social Science 22.00 (SPSS) statistical package programme. Shapiro-Wilk normality analysis was applied to determine the suitability of the measured parameters for normal distribution. All of the measured parameters were found to be suitable for normal distribution. In the evaluation of the obtained data, percentage, mean, standard deviation and paired t test statistical calculation method were used as descriptive statistical methods. The data were analysed at 95% confidence interval and $p < 0.05$ (15).



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2.4.Ethical aspects of the research

Permission was obtained from the Ethics Committee of the University (decision no: 2021/05 - 28) to conduct the research. All participants voluntarily participated in the study. The purpose of the study was explained by the researchers and informed signed consent was obtained from those who agreed to participate in the study. To those who voluntarily participated in the research; the researchers undertook that all information would be kept confidential, the data obtained would be used only for research purposes and that they could withdraw from the research at any time. The research was conducted in accordance with the principles of the Declaration of Helsinki.

3. RESULTS

Table 1: Distribution of patients according to demographic characteristics (n=219)

Characteristics	n	%
Age (mean \pm SD)	38.11 \pm 8.4 (min:25.00, max:69.00)	
Gender		
Female	103	47.0
Male	116	53.0
Profession		
Unemployed	11	5.0
Housewife	59	26.9
Civil servant	58	26.5
Retired	66	15.1
Labourer	49	8.7
Self-employment	39	17.8
Marital Status		
Married	162	74.0
Single	57	26.0
Education Status		
Illiterate	32	14.6
Primary school	35	16.0
Secondary school	26	11.9
High school	53	24.2
University	73	33.3
Previous surgery status		
Yes	140	63.9
No	79	36.1
Presence of chronic disease		
Yes	78	35.6
No	141	64.4



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The mean age of the patients who participated in the study was 38.11 ± 8.4 years. It was observed that 53% of the patients were male, 26.9% were housewives, 74% were married and 24.2% were high school graduates. It was found that 63.9% of the patients had undergone surgery before and 64.4% had no chronic disease (Table 1).

Table 2: Distribution of patients according to their informed status regarding the surgical process (n=219)

Characteristics	n	%
Information on the Preoperative Period		
-No information given	82	37.4
-Informed by the nurse	47	21.5
-Informed by the doctor	90	41.1
Informed about the Intraoperative Period		
- No information given	111	50.7
- Informed by the nurse	60	27.4
- Informed by the doctor	48	21.9
Informed about the Postoperative Period		
- No information given	85	38.8
- Informed by the nurse	49	22.4
-Informed by the doctor	85	38.8

It was found that 41.1% of the patients who were informed in the preoperative period were informed by the doctor, 27.4% of the patients who were informed in the intraoperative period were informed by the nurse, and 38.8% of the patients were informed by the doctors in the postoperative period (Table 2).

Table 3: Comparison of Surgical Fear Before and After Training

SCALE	Pre-training Mean \pm SD	Post-training Mean \pm SD	T test	p
Fear of Surgery	44.67 \pm 19.96	33.87 \pm 17.63	19.747	0.001
Short-term results				
Fear of surgery	22.54 \pm 10.16	17.37 \pm 8.98	12.412	0.001
Long-term results				
Fear of surgery	22.12 \pm 10.50	16.50 \pm 9.31	18.696	0.001



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In the study, while the total mean score of the surgical fear scale was 44.67 ± 19.96 before the training, the total mean score decreased to 33.87 ± 17.63 after the training, and there was a significant difference between the total scores of the surgical fear scale before and after the training ($p < 0.05$). A significant difference was found between the mean scores of the surgical fear sub-dimension related to short-term consequences before and after the training ($p < 0.05$). A significant difference was found between the mean scores of the surgical fear sub-dimension related to long-term outcomes before and after the training ($p < 0.05$) (Table 3).

4. DISCUSSION

Although there are treatment interventions aiming to protect and improve the patient's life, all surgical interventions are perceived by the patient as life-threatening and frightening practices. The stress created by this perception causes a physiological and psychological response in the body. From the diagnosis of the disease, the decision for surgical intervention and hospitalisation increases the patient's fear and anxiety level. This fear experienced by the patient may lead to delay in wound healing after surgical intervention, prolonged discharge time, prolonged treatment time and problems in compliance with treatment (16). Therefore, surgical fear should be evaluated in the preoperative period and patients should be informed about the surgical process.

In the study, while the total mean score of the surgical fear scale was 44.67 ± 19.96 before the training, the total mean score decreased to 33.87 ± 17.63 after the training, and there was a significant difference between the total scores of the surgical fear scale before and after the training ($p < 0.05$) (Table 3). Lee et al. In a study conducted with patients undergoing spinal surgery, anxiety was found to be significantly lower in the intervention group that received training (10). Kaya and Özlü reported that the level of surgical fear was 37.55 ± 21.11 in their study with patients undergoing elective surgical intervention (16). Marsy reported that preoperative surgical fear was high in his study (17). In the study, a significant difference was found between the mean scores of the surgical fear sub-dimension related to short- and long-term results before and after the training ($p < 0.05$). Kaya and Özlü reported that the level of fear related to short-term consequences of surgical intervention was 18.03 ± 11.44 and the level of fear related to long-term consequences of surgical intervention was 19.52 ± 11.87 (16).

5. CONCLUSION

It was found that fear of surgery decreased with preoperative education. It is thought to be useful in reducing the negative effects of surgical fear, accelerating wound healing and reducing surgical complications by reducing the existing fear with nursing interventions.



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Oral Presentation-12

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Abordagem Multifacetada para o Controle da Sífilis Congênita: Diagnóstico Precoce, Tratamento Eficaz e Estratégias de Prevenção

Multifaceted Approach to Controlling Congenital Syphilis: Early Diagnosis, Effective Treatment and Prevention Strategies

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ABSTRACT

Congenital syphilis is a serious disease that results from the transmission of syphilis infection from mother to fetus during pregnancy. This condition can lead to a series of complications for the baby, including congenital malformations, premature birth, low birth weight, neurological damage, deafness, visual problems and, in severe cases, even fetal or neonatal death.

Effective management of congenital syphilis begins with early diagnosis during prenatal care. Syphilis screening tests should be routinely performed on all pregnant women, especially those with risk factors such as a history of sexually transmitted infections, multiple sexual partners or use of illicit drugs.

If a pregnant woman is diagnosed with syphilis, immediate treatment with penicillin is essential to prevent transmission of the disease to the fetus. Depending on the stage of syphilis, treatment may vary in duration and dose, and is generally administered intramuscularly.

Congenital syphilis continues to be a global public health problem, with a worrying increase in many regions of the world. The lack of access to adequate medical care, the stigmatization of sexually transmitted diseases and the lack of education about sexual and reproductive health are some of the factors that contribute to the persistence of this epidemic.

Preventing congenital syphilis requires a comprehensive approach that includes sexual and reproductive health education, promotion of condom use, screening and early treatment of pregnant women, appropriate treatment of infected sexual partners, and public awareness programs.

Regular monitoring during pregnancy is essential to detect and treat congenital syphilis, thus reducing the impact of this preventable disease and protecting the health of future generations.

Keywords: Syphilis; pregnancy; congenital syphilis: neonatal.



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RESUMO

A sífilis congênita é uma doença grave que resulta da transmissão da infecção de sífilis da mãe para o feto durante a gravidez. Esta condição pode levar a uma série de complicações para o bebê, incluindo malformações congênitas, parto prematuro, baixo peso ao nascer, danos neurológicos, surdez, problemas visuais e, em casos graves, até mesmo morte fetal ou neonatal.

O manejo eficaz da sífilis congênita começa com o diagnóstico precoce durante o pré-natal. Testes de triagem para sífilis devem ser realizados rotineiramente em todas as gestantes, especialmente aquelas que apresentam fatores de risco, como histórico de infecções sexualmente transmissíveis, múltiplos parceiros sexuais ou uso de drogas ilícitas.

Se uma gestante for diagnosticada com sífilis, o tratamento imediato com penicilina é fundamental para evitar a transmissão da doença para o feto. Dependendo do estágio da sífilis, o tratamento pode variar em duração e dose, sendo geralmente administrado por via intramuscular.

A sífilis congênita continua a ser um problema de saúde pública global, com um aumento preocupante em muitas regiões do mundo. A falta de acesso a cuidados médicos adequados, a estigmatização das doenças sexualmente transmissíveis e a falta de educação sobre saúde sexual e reprodutiva são alguns dos fatores que contribuem para a persistência dessa epidemia.

A prevenção da sífilis congênita requer uma abordagem abrangente que inclua educação sobre saúde sexual e reprodutiva, promoção do uso de preservativos, rastreamento e tratamento precoce de gestantes, tratamento adequado de parceiros sexuais infectados e programas de conscientização pública.

O monitoramento regular durante a gravidez é fundamental para detectar e tratar a sífilis congênita, reduzindo assim o impacto dessa doença evitável e protegendo a saúde das futuras gerações.

Palavras - chave: Sífilis; gravidez; sífilis congênita: neonatal.



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Oral Presentation-13

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Avaliação Comparativa Das Implicações Maternas E Neonatais Entre Cesarianas Eletivas E Partos Vaginais

Comparative Assessment of Maternal and Neonatal Implications Between Elective Cesarean Sections and Vaginal Births

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RESUMO

Os métodos mais comuns de parto, a cesariana e o parto vaginal, possuem características distintas com significativas implicações para a saúde materna e neonatal. A cesariana, sendo uma intervenção cirúrgica onde o bebê é removido através de uma incisão abdominal, difere do parto vaginal, que ocorre através do canal de parto culminando na expulsão do bebê pela vagina. A escolha entre uma cesariana eletiva e um parto vaginal pode ser influenciada por diversos fatores, incluindo indicações médicas, preferências pessoais e práticas obstétricas locais (Entringer; Pinto; Gomes, 2018). O aumento das taxas de cesariana em várias regiões do mundo, muitas vezes ultrapassando as recomendações da Organização Mundial da Saúde (OMS), levanta preocupações sobre o uso excessivo deste método, especialmente em casos sem indicações médicas claras.

Nos últimos anos, observou-se um aumento significativo nas taxas de cesariana globalmente, com algumas regiões reportando índices acima do recomendado pela OMS. Esse aumento gera preocupações sobre o uso excessivo de cesarianas eletivas, particularmente na ausência de indicações médicas claras. Por outro lado, o parto vaginal continua prevalente em muitas partes do mundo, embora também possa estar sujeito a intervenções médicas desnecessárias que aumentam os riscos para a mãe e o bebê (Rossetto et al., 2020). A decisão entre cesariana eletiva e parto vaginal deve ser cuidadosamente avaliada, considerando os riscos e benefícios para ambos, discutidos em profundidade com um profissional de saúde qualificado (Jordana Ribeiro Martins; Catarina; Elisângela Reis Mantovani, 2023).

A comparação entre cesariana eletiva e parto vaginal revela implicações distintas para a saúde materna. A cesariana eletiva, apesar de oferecer vantagens em termos de programação e controle do parto, está associada a um maior risco de complicações cirúrgicas, como hemorragias, infecções e lesões uterinas (Rodrigues; Silva, 2018). Essas complicações podem prolongar o tempo de recuperação pós-operatória, aumentar o período de internação hospitalar e elevar a necessidade de cuidados pós-parto, impactando negativamente a qualidade de vida das mães. Além disso, a cesariana pode aumentar o risco de complicações em gestações futuras, incluindo placenta prévia e placenta acreta, que demandam intervenções obstétricas adicionais (Silva et al., 2022).

Em contrapartida, o parto vaginal é geralmente considerado mais seguro e menos invasivo em termos de complicações maternas. Mulheres que optam pelo parto vaginal apresentam menor probabilidade de enfrentar complicações cirúrgicas e geralmente se recuperam mais rapidamente após o parto (José et al., 2010). No entanto, é importante ressaltar que o parto vaginal pode apresentar desafios, como lacerações perineais ou distócias de ombro (Moraes et al., 2022). A decisão entre cesariana eletiva e parto vaginal deve ser baseada na avaliação cuidadosa dos riscos e benefícios para a mãe e o bebê, e deve envolver discussões detalhadas com profissionais de saúde.

A escolha do método de parto também influencia significativamente a saúde neonatal. Bebês nascidos por cesariana podem apresentar maior incidência de dificuldades respiratórias devido à ausência do processo de compressão do tórax durante a passagem pelo canal de parto, essencial para a eliminação do líquido dos pulmões (Silva et al., 2019). Além disso, a cesariana pode afetar a colonização inicial da microbiota intestinal do recém-nascido, influenciando o desenvolvimento do sistema imunológico e a suscetibilidade a doenças futuras (Câmara et al., 2016). A recuperação materna prolongada associada à cesariana também pode impactar negativamente a amamentação, essencial para a saúde e o desenvolvimento do recém-nascido (José et al., 2010). Portanto, ao decidir entre cesariana eletiva e parto vaginal, é crucial considerar uma gama de fatores para otimizar os resultados de saúde tanto para a mãe quanto para o bebê.



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Fibromialgia: Abordagens Atuais em Epidemiologia e Tratamento

Fibromyalgia: Current Approaches in Epidemiology and Treatment

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RESUMO

A fibromialgia é uma condição crônica caracterizada por dor generalizada, fadiga, distúrbios do sono e sensibilidade aumentada nas articulações, músculos e tecidos moles. Sua etiologia exata ainda não é totalmente compreendida, mas parece envolver uma combinação de fatores genéticos, neurobiológicos e ambientais.

Em termos de epidemiologia, a fibromialgia afeta principalmente mulheres entre 30 e 60 anos de idade, embora também possa ocorrer em homens e crianças. Estima-se que entre 2% e 8% da população mundial tenha fibromialgia, tornando-a uma das condições musculoesqueléticas mais comuns.



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Oral Presentation-14 (*continue*)

O tratamento da fibromialgia visa aliviar os sintomas e melhorar a qualidade de vida do paciente. Isso geralmente envolve uma abordagem multimodal que combina medicamentos, terapias não farmacológicas e mudanças no estilo de vida. Analgésicos, como paracetamol ou anti-inflamatórios não esteroides (AINEs), podem ser prescritos para aliviar a dor. Além disso, medicamentos como antidepressivos tricíclicos, inibidores seletivos da recaptação da serotonina (ISRS) e anticonvulsivantes podem ser usados para ajudar a controlar a dor, melhorar o sono e reduzir a fadiga.

Além do tratamento medicamentoso, a fisioterapia desempenha um papel importante no manejo da fibromialgia. Isso pode incluir exercícios de alongamento, fortalecimento e aeróbicos adaptados às necessidades individuais do paciente. Terapias cognitivo-comportamentais (TCC) também são frequentemente recomendadas para ajudar os pacientes a lidar com o estresse, a ansiedade e a depressão associados à fibromialgia.

Embora a fibromialgia seja uma condição crônica e não tenha cura, muitos pacientes conseguem encontrar alívio dos sintomas com o tratamento adequado. Uma abordagem individualizada, que leve em consideração as necessidades específicas de cada paciente, é fundamental para otimizar os resultados do tratamento e melhorar a qualidade de vida a longo prazo.

Palavras - chave: fibromialgia; dor crônica; terapêutica



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Poster Presentations



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Poster Presentation-1

Dyspareunia and Depression

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ABSTRACT

Depression and coital pain, or dyspareunia, represent interconnected health issues with significant physical and psychological impacts on affected individuals. Depression, characterized by persistent sadness, fatigue, and cognitive impairment, is linked to a range of somatic symptoms, including pain. Pain during sexual intercourse, whether physiological or psychogenic, can exacerbate feelings of isolation, low self-esteem, and emotional distress, which are hallmarks of depression. Conversely, the presence of coital pain can lead to or intensify depressive symptoms, creating a cyclical relationship between the two conditions. This association is of particular concern for women, as studies suggest a higher prevalence of dyspareunia and depression in this population. Addressing both conditions through multidisciplinary approaches that include psychological support, pain management, and sexual health counseling is essential for improving patient outcomes and enhancing quality of life. Further research is needed to better understand the mechanisms underlying the depression-dyspareunia connection and to develop targeted interventions.