



Dental Abscess: The Contribution Role of Dentist, Pharmacist, and Nursing for Infection Management

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Abstract:

Background: Dental abscesses are periapical infections that develop due to untreated dental caries, trauma, or failed dental procedures. They present significant risks, including severe pain and potentially life-threatening complications, such as deep neck infections. Effective management requires a multidisciplinary approach involving dentists, pharmacists, and nurses.

Aim: To evaluate the etiology, epidemiology, diagnosis, and management strategies for dental abscesses, emphasizing the collaborative roles of dentist, pharmacist, and nursing in infection control.

Methods: A comprehensive review was conducted, exploring the etiology, epidemiology, and pathophysiology of dental abscesses. Diagnostic evaluations, imaging modalities, and management strategies, including pharmacological interventions, were examined. The contribution of dentists, pharmacists, and nurses in patient care and education was highlighted.

Results: Dental abscesses commonly result from bacterial invasion due to compromised enamel integrity. Prevalence is high among individuals with poor oral hygiene, limited dental care access, or systemic vulnerabilities. Diagnostic tools such as imaging and laboratory tests are critical for determining infection severity. Management involves abscess drainage, antibiotics, and targeted education. Penicillin-based therapies, often combined with metronidazole, remain standard; however, resistance has necessitated broader-spectrum alternatives like amoxicillin-clavulanate and clindamycin.

Conclusion: Dental abscess management requires timely interventions, a tailored antibiotic regimen, and patient education on oral hygiene. Addressing systemic disparities in dental care access is critical to reducing the prevalence and complications of abscesses. Collaborative efforts among healthcare professionals ensure effective treatment and prevention.

Keywords: Dental abscess, oral hygiene, antibiotics, Nursing, Pharmacist, collaborative care, infection management

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Introduction:

Dental infections, while relatively straightforward in terms of diagnosis and accessibility, can present considerable challenges in acute management. Dental abscesses, also referred to as periapical infections, often develop as secondary complications arising from untreated dental caries, trauma, or failed

root canal procedures. Dental caries, a common result of suboptimal oral hygiene, leads to the breakdown of tooth enamel, exposing the pulp cavity to bacterial invasion. These infections, if not promptly addressed, can result in significant discomfort and potentially life-threatening complications, such as the spread of infection to deep neck spaces or intracranial sinuses. The risk of such complications underscores the importance of early diagnosis and appropriate therapeutic intervention. Beyond treatment, educating patients about preventive measures is essential in mitigating recurrent episodes and ensuring long-term oral health stability. Untreated dental abscesses are characterized by intense pain due to the confined nature of the infection within the tooth. As the abscess develops, it can affect surrounding tissues, further exacerbating the patient's condition. Advanced stages of the infection may require surgical intervention or hospitalization to manage systemic involvement effectively. These considerations highlight the multifaceted approach required to manage dental abscesses, combining clinical intervention, patient education, and preventative strategies. Ultimately, addressing the root causes of dental infections—such as poor oral hygiene, limited access to dental care, and lack of awareness—remains a critical aspect of reducing their prevalence and associated morbidity [1][2].

Etiology of Dental Abscesses

Dental abscesses arise from a combination of factors, with dental caries, trauma, and poor oral hygiene being the most prominent contributors. These factors compromise the protective enamel layer of the teeth, allowing oropharyngeal bacteria to infiltrate the pulp cavity. Once bacteria invade this space, they establish an infection that exerts pressure on the dentinal walls within the confined environment of the tooth. This process is typically accompanied by severe pain and discomfort. Over time, the infection may extend beyond the tooth, traveling inferiorly into the mandible or superiorly into the maxilla, depending on the anatomical location of the affected tooth. Partially erupted teeth, particularly wisdom teeth, present another risk factor for dental abscesses. In such cases, bacteria become trapped between the crown and surrounding soft tissues, leading to localized inflammation and infection. Additional predisposing factors include genetic conditions such as amelogenesis imperfecta, which weakens enamel and increases susceptibility to bacterial invasion. Mechanical factors, such as bruxism or teeth grinding, also contribute to enamel breakdown, while medical conditions like Sjogren's syndrome exacerbate risk by reducing saliva production and enabling bacterial proliferation. Immunosuppressive conditions, such as those resulting from chemotherapy or chronic illnesses like HIV/AIDS, further compound this vulnerability. Environmental factors, including exposure to chemical irritants like methamphetamine smoke, also play a role by accelerating enamel deterioration and facilitating microbial growth. Addressing these multifactorial causes through comprehensive dental care and patient education is crucial for reducing the incidence and severity of dental abscesses [3][4].

Epidemiology of Dental Abscesses

Dental abscesses and their underlying causes, such as dental caries and poor oral health, are prevalent issues in the United States. Data from the National Health and Nutrition Examination Survey (2011–2012) indicates that 91% of adults aged 20 to 64 have experienced dental caries at some point, with 27% having untreated tooth decay. Disparities in untreated decay rates are evident, with Hispanic adults reporting a rate of 36%, non-Hispanic Black Americans at 42%, and non-Hispanic White adults experiencing lower rates overall. Older adults, particularly those over 65 years, also face challenges, with approximately 19% living with untreated dental caries (Dye et al., 2012). Hospital admissions due to dental infections reflect the broader public health challenge posed by poor dental hygiene. A study by Wang et al. (2005) found that dental infection admissions occur at a rate of one per 2,600 individuals annually in the United States. Pediatric emergency room visits for dental abscesses are particularly significant, with a study by Graham et al. (2000) reporting that nearly 47% of such visits are related to dental abscesses. These statistics underscore the widespread prevalence of dental issues and their disproportionate impact on certain racial and socioeconomic groups. Factors such as limited access to dental care, cultural perceptions of oral health, and financial barriers exacerbate these disparities. These findings highlight the need for targeted public health interventions to address systemic inequities, promote oral hygiene, and improve access to preventive and therapeutic dental services [5][6].

Pathophysiology

Tooth Anatomy and Structure

The anatomical structure of the tooth comprises the crown, which connects to the root, anchoring the tooth into the gums and jawbone. The crown is externally protected by enamel, a dense and mineralized substance that serves as the tooth's primary defense against external forces and bacterial invasion. Beneath the enamel lies the dentine, a softer, porous layer that provides additional structural support. Extending from the root into the innermost region of the tooth is the pulp canal, a hollow cavity that houses nerves and vasculature. These neural and vascular structures supply the tooth with nutrients and sensory input, enabling its function and vitality. The root canal system serves as a conduit for nerves and blood vessels, emphasizing its critical role in maintaining dental health and function.

Oral Cavity Flora

The oral cavity is a dynamic microbial ecosystem predominantly inhabited by gram-negative and facultative anaerobic bacteria. The distribution of bacteria varies across different surfaces of the oral cavity, with *Streptococcus mitis* frequently colonizing the tooth surfaces, as reported by Jorn et al. (2005). However, *S. mitis* is not always implicated in the pathogenesis of dental abscesses, as various other oral bacterial species may gain entry into the tooth. This infiltration can occur through multiple pathways, including trauma, poor oral hygiene, or failed dental procedures. The complexity and diversity of oral cavity flora underscore the multifactorial etiology of dental infections and highlight the need for precise identification of causative organisms in clinical management.

History and Physical

The diagnosis of a dental abscess requires a thorough assessment of patient history and physical findings. Patients often report severe, localized pain, exacerbated by palpation, alongside a history of poor dental hygiene, inadequate dental care follow-up, or unaddressed dental trauma. Symptoms such as facial erythema, trismus, dysphagia, fever, and lymphadenopathy are commonly associated with dental abscesses. Additionally, gingival erythema and swelling may surround the affected tooth, which may also exhibit discoloration or structural damage, such as breaks in the enamel. Critical signs necessitating immediate medical attention include altered mental status and dyspnea, as these could indicate severe systemic involvement or airway compromise. When conducting an oral cavity examination, visual and tactile inspection of the suspected tooth can reveal signs of infection, including noticeable enamel damage or pulp exposure. Facial asymmetry due to swelling and lymph node tenderness may also be observed, further supporting the diagnosis. This comprehensive approach to history-taking and physical examination allows for the early identification of complications, ensuring timely and effective intervention.

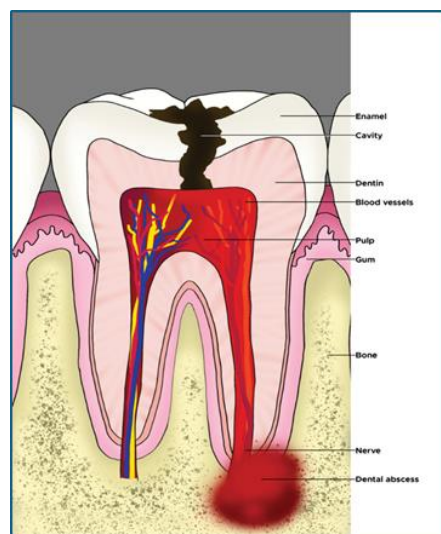


Figure 1: Dental Abscess.

Evaluation

Diagnostic evaluation of a dental abscess often begins with imaging and laboratory assessments to confirm the presence of infection and evaluate its extent. Computed tomography (CT) and magnetic resonance imaging (MRI) are highly sensitive modalities for identifying abscesses and their precise anatomical location. Initial imaging studies should include x-rays of the head and neck, which are particularly valuable in detecting complications such as tracheal compression or subcutaneous air associated with necrotic tissue. Furthermore, advanced imaging can assess the potential spread of bacterial infection to adjacent sinus cavities or deep neck spaces. Laboratory investigations, including a complete blood cell count (CBC), are essential in evaluating the systemic response to infection. An elevated total white blood cell count with a predominant neutrophil line typically indicates bacterial infections in individuals with intact immune systems. This increase in neutrophils reflects the body's response to bacterial invasion, aiding in the differentiation between bacterial and other etiologies of inflammation. Collectively, these diagnostic tools provide a comprehensive assessment of the infection, enabling clinicians to devise an appropriate treatment plan while minimizing the risk of systemic complications.

Treatment, Management, and Pharmacist Interventions:

The treatment of dental abscesses requires a multifaceted approach, including abscess drainage, administration of antibiotics, pain management, and elimination of the source of infection. For many cases, oral antibiotics coupled with timely dental interventions are sufficient to resolve the issue. Hospitalization and intravenous antibiotic therapy are typically unnecessary unless the patient exhibits concerning symptoms such as fever, respiratory distress, or airway obstruction caused by swelling. Standard antibiotic regimens for dental abscesses target gram-negative bacteria, facultative anaerobes, and strict anaerobes [1]. Penicillins and cephalosporins are commonly employed in odontogenic infections; however, the rise of antimicrobial resistance, particularly due to B-lactamase-producing bacteria, has necessitated modifications in therapeutic strategies. Combining penicillins with other antimicrobials, such as metronidazole or broader-spectrum agents like ampicillin-sulbactam and amoxicillin-clavulanate, is often recommended. For example, ampicillin-sulbactam can be administered intravenously at a dose of 3 grams every 6 hours, while amoxicillin-clavulanate is prescribed orally at a dose of 875 milligrams every 12 hours. Additionally, penicillin G may be administered intravenously at doses of 2 to 4 million units every 4 to 6 hours in conjunction with metronidazole, dosed at 500 milligrams either intravenously or orally every 8 hours. Cephalosporins like cefoxitin (1 to 2 grams intravenously every 4 hours) and cefotetan (2 grams intravenously every 12 hours) are also viable options.

Macrolides are generally reserved for patients with allergies to penicillins or cephalosporins, given the rising resistance among anaerobic *Streptococci* and *Prevotella* species. Metronidazole, known for its robust activity against anaerobic bacteria, lacks coverage for aerobic gram-positive organisms and is thus combined with penicillin to broaden antimicrobial efficacy. In cases involving penicillin or cephalosporin allergies, clindamycin, which offers excellent coverage for gram-positive organisms, anaerobes, and B-lactam-resistant pathogens, serves as an effective alternative. Clindamycin is also notable for its superior bone penetration and demonstrated comparable efficacy to penicillin V in managing severe odontogenic infections, as evidenced by Gilmore et al. The typical dosing for clindamycin is 600 milligrams intravenously every 6 to 8 hours. For severe infections or immunocompromised patients, broader-spectrum antibiotics such as fourth-generation or higher cephalosporins, extended-spectrum penicillins like piperacillin-tazobactam, or carbapenems like meropenem may be necessary. Piperacillin-tazobactam is administered at a dose of 4.5 grams intravenously every 6 hours, meropenem at 1 gram intravenously every 8 hours, and cefepime at 1 to 2 grams intravenously every 12 hours. These agents are particularly reserved for cases involving multidrug-resistant organisms or life-threatening infections [7].

Differential Diagnosis

The diagnosis of a dental abscess necessitates a thorough evaluation to distinguish it from other potential conditions with overlapping clinical presentations. Differential diagnoses encompass a variety of pathologies, including buccal bifurcation cysts, which are localized inflammatory lesions occurring in the

mandibular molar region, and eosinophilic granulomas, which represent benign but aggressive lesions arising from Langerhans cell proliferation. Gingival abscesses, localized to the gum tissue without extension to the periodontal ligament or alveolar bone, must also be considered. Additionally, Langerhans cell histiocytosis, a rare disorder characterized by abnormal proliferation of Langerhans cells, can mimic the features of a dental abscess. Lateral periodontal cysts, typically non-inflammatory and arising adjacent to the root of a vital tooth, represent another differential to exclude. Osteomyelitis, an infection involving the bone, often presents with systemic symptoms and radiographic findings of bone destruction, further complicating the differential process. Periapical abscesses, which involve localized infection at the apex of a tooth, and periapical granulomas or cysts, which are non-infectious sequelae of pulp necrosis, must also be distinguished. A peritonsillar abscess, primarily affecting the oropharyngeal region, may present with similar symptoms such as pain and swelling. Furthermore, vertical root fractures, which can occur due to trauma or endodontic treatments, often present with localized inflammation and pain, necessitating careful radiographic examination to identify the fracture line [7].

Surgical Oncology

The surgical management of dental abscesses often involves procedures such as root canals or tooth extractions, with incision and drainage serving as crucial interventions for managing periapical abscesses. These procedures can be initiated in emergency or outpatient settings but require subsequent follow-up by dental specialists. In the case of a root canal, the process involves removing the infected pulp tissue by accessing the tooth crown and root canal system. The canals are meticulously cleaned using surgical instruments and irrigation solutions, followed by the placement of a biocompatible filling material and restoration of the tooth crown. Potential complications associated with root canal procedures include the accidental breakage of surgical instruments within the canal, incomplete debridement of bacterial infection, and structural compromises such as cracked teeth. These complications may necessitate repeat endodontic treatments or, in severe cases, complete tooth extraction. In instances where incision and drainage are performed, careful monitoring is essential to prevent recurrence or further complications, ensuring the abscess is fully evacuated and the infection does not spread to adjacent tissues. Postoperative care includes appropriate antimicrobial therapy and follow-up dental evaluations to address the underlying cause of the abscess and to prevent future occurrences [7].

Prognosis

The prognosis for dental abscesses is highly favorable with timely and appropriate treatment. However, neglecting to address the condition can lead to severe complications with potentially life-threatening consequences. In cases where the infection descends to the mediastinum, the mortality rate can rise dramatically, reaching up to 40% [Shweta et al., 2013]. Such advanced infections necessitate immediate intervention to prevent further deterioration. For example, patients experiencing airway compromise may require urgent measures such as intubation or tracheostomy to maintain respiratory stability. Furthermore, ascending infections that spread through the sinus cavities or via the bloodstream to the brain present a significant threat, often associated with a poor prognosis and increased mortality rates. These severe outcomes underscore the importance of early diagnosis and intervention. Patients with dental abscesses who receive timely drainage of the infection and follow-up dental care typically experience a complete recovery with minimal long-term effects. On the other hand, delayed treatment can allow the infection to spread, leading to systemic complications or the loss of affected teeth. Thus, patient education and prompt access to care are pivotal in improving outcomes. Overall, the prognosis is excellent when healthcare providers address the condition promptly and comprehensively, emphasizing the need for multidisciplinary care and patient adherence to recommended treatment protocols [7].

Consultations

In the management of complex dental abscesses, consultation with a maxillofacial surgeon or an available dentist is imperative. These specialists possess the expertise required to handle intricate cases, such as those involving deep tissue infections or complications from anatomical challenges. Early engagement of a specialist ensures thorough evaluation and appropriate treatment strategies, including

surgical drainage, root canal procedures, or tooth extraction. Maxillofacial surgeons and dentists are also essential when initial treatments fail to resolve the abscess or if the infection shows signs of spreading beyond the oral cavity. Their skills in advanced imaging, surgical techniques, and infection control can prevent complications like osteomyelitis or deep space infections. Furthermore, in cases of airway compromise or systemic involvement, the collaboration of these specialists with critical care teams becomes indispensable. Healthcare providers should maintain a low threshold for involving these experts, especially when the patient presents with significant swelling, trismus, or systemic symptoms like fever and tachycardia. Timely consultation can significantly enhance patient outcomes, reduce the risk of severe complications, and improve the overall efficiency of the treatment process. Such an interdisciplinary approach fosters better prognosis and ensures that the condition is managed comprehensively from the outset [7].

Enhancing Healthcare Team Outcomes

The effective management of dental abscesses requires a coordinated effort among healthcare providers, with a primary focus on timely recognition and referral. Patients with a dental abscess often present with hallmark symptoms, including localized oral pain, fever, difficulty chewing, and swelling. Non-dental healthcare professionals, such as emergency physicians and primary care providers, must promptly identify these symptoms and refer patients to dental specialists or oral surgeons for definitive care. Initial management in non-specialist settings typically involves the administration of broad-spectrum antibiotics to curb infection and a drainage procedure to alleviate immediate symptoms. However, these measures are temporary and must be followed by comprehensive dental treatment, such as root canal therapy or extraction of the affected tooth. Timely referrals and coordinated follow-up care can prevent complications, such as the spread of infection to adjacent anatomical structures or systemic involvement. Delayed treatment is a major risk factor for adverse outcomes, including tooth loss or severe systemic infections. Therefore, enhancing collaboration among healthcare team members is crucial. Education and training programs for non-dental providers can improve their ability to identify and manage dental abscesses effectively. Additionally, clear communication between dental and medical teams ensures continuity of care. When patients are treated promptly and comprehensively, the prognosis is excellent, highlighting the importance of an integrated, patient-centered approach to managing dental abscesses [7].

Nursing Interventions:

Dental abscesses are localized infections in the oral cavity that require prompt and effective nursing care to alleviate pain, prevent complications, and facilitate recovery. Nursing interventions for dental abscesses focus on symptom management, infection control, and patient education. A comprehensive care plan must be tailored to address the patient's needs while ensuring adherence to prescribed treatments.

Assessment and Monitoring

The first step in nursing care involves a thorough assessment to identify symptoms such as pain, swelling, fever, and difficulty chewing or swallowing. Nurses should assess the patient's oral cavity for visible abscesses, redness, and tenderness. Vital signs, including temperature, heart rate, and respiratory rate, must be monitored regularly to detect systemic involvement or sepsis. Close observation is essential for identifying signs of airway obstruction, especially in severe cases. Documenting the patient's medical and dental history is also crucial to understanding predisposing factors and planning appropriate interventions.

Pain Management

Pain is a primary concern for patients with dental abscesses. Nursing interventions include administering prescribed analgesics, such as nonsteroidal anti-inflammatory drugs (NSAIDs) or acetaminophen, and providing comfort measures like warm compresses to reduce swelling. Nurses should educate patients about maintaining proper oral hygiene to minimize discomfort and prevent further

irritation of the abscessed area. Encouraging the use of mouth rinses, such as saline or antiseptic solutions, can also help reduce inflammation and promote healing.

Infection Control

Nurses play a key role in controlling infection by ensuring timely administration of antibiotics as prescribed. Antibiotics like penicillins, cephalosporins, or clindamycin may be used, depending on the patient's medical history and bacterial resistance patterns. Nurses should monitor the patient for signs of improvement, such as reduced swelling and pain, and observe for adverse reactions to antibiotics, including allergic responses. For patients undergoing surgical drainage of the abscess, nurses must maintain a sterile environment during the procedure and assist with wound care postoperatively.

Airway Management

In severe cases where the abscess causes swelling that compromises the airway, nurses must act promptly to ensure patient safety. This includes positioning the patient to facilitate breathing, administering oxygen as needed, and preparing for potential emergency interventions like intubation or tracheostomy. Collaboration with healthcare providers, including maxillofacial surgeons or anesthesiologists, is critical in such scenarios.

Nutritional Support

Dental abscesses can make eating and drinking challenging, leading to nutritional deficiencies and dehydration. Nurses should assess the patient's dietary intake and encourage soft, nutrient-rich foods that are easy to chew and swallow. Offering guidance on maintaining hydration is equally important. In severe cases, intravenous fluids may be administered to ensure adequate hydration and electrolyte balance.

Patient Education

Education is a cornerstone of nursing care for dental abscesses. Nurses should instruct patients on the importance of completing the prescribed course of antibiotics to prevent recurrence or complications. Educating patients about proper oral hygiene practices, such as regular brushing, flossing, and using fluoride-containing products, is vital in preventing future dental infections. Nurses should also emphasize the importance of routine dental visits to address minor issues before they progress into serious conditions.

Psychosocial Support

Patients with dental abscesses may experience anxiety or fear related to their condition or the prospect of dental procedures. Nurses should provide emotional support by addressing the patient's concerns, explaining treatment plans, and fostering a sense of trust. For pediatric or geriatric patients, additional care and reassurance may be needed to alleviate stress and ensure cooperation.

Care Plan Goals and Outcomes

A well-structured nursing care plan for dental abscesses aims to achieve specific goals, including pain relief, infection resolution, prevention of complications, and patient education. The desired outcomes include:

- Significant reduction or elimination of pain and swelling.
- Complete resolution of the infection with no systemic involvement.
- Preservation of the affected tooth, when feasible.
- Patient adherence to prescribed medications and follow-up dental care.
- Improved oral hygiene practices and awareness of preventive measures.

Evaluation and Follow-Up

Evaluating the effectiveness of nursing interventions is crucial for ensuring positive patient outcomes. Regular follow-up is necessary to monitor healing progress and reinforce education on oral

health maintenance. Nurses should document the patient's response to treatment, noting improvements or any signs of complications. In cases where the abscess does not resolve or recurs, nurses must facilitate timely referrals to dental or medical specialists for further evaluation. In conclusion, nursing interventions for dental abscesses require a holistic and patient-centered approach. By addressing pain, controlling infection, ensuring proper nutrition, and educating patients on preventive care, nurses play an integral role in the effective management of this condition. Collaborative care and ongoing patient engagement are essential to achieving long-term oral health and preventing future complications.

Conclusion:

Dental abscesses represent a significant health challenge, arising from factors such as untreated dental caries, trauma, or poor oral hygiene. These infections, while localized, can have systemic repercussions if not promptly managed, underscoring the need for timely intervention and preventive strategies. The multifactorial etiology highlights the role of poor access to dental care, cultural perceptions of oral health, and financial constraints in exacerbating the prevalence of dental abscesses, particularly among vulnerable populations. Effective management relies on a comprehensive approach that integrates the expertise of dentists, pharmacists, and nurses. Dentists play a central role in diagnosing and treating abscesses, often employing imaging tools and surgical interventions. Pharmacists contribute through the provision of appropriate antimicrobial regimens, including penicillins, cephalosporins, and alternatives such as clindamycin for resistant infections or allergic patients. Nurses are pivotal in delivering patient education, emphasizing oral hygiene practices, and monitoring treatment adherence to prevent recurrences. The rise of antimicrobial resistance has necessitated a shift toward broader-spectrum antibiotics and combination therapies, such as ampicillin-sulbactam and metronidazole. Tailoring treatment plans to individual patient needs and ensuring equitable access to care are critical for improving outcomes. Furthermore, addressing systemic barriers through public health initiatives can reduce disparities in dental health and associated complications. In conclusion, the collaborative efforts of healthcare professionals, coupled with patient education and preventive care, are essential in managing dental abscesses effectively. Enhancing access to dental care, promoting awareness of oral hygiene, and mitigating risk factors can significantly reduce the burden of these infections. Future research should focus on optimizing treatment protocols and exploring novel therapeutic options to address the challenges posed by resistant pathogens and complex cases.

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الملخص:

الخلفية:خراجات السنية هي التهابات حول قمية السن تحدث نتيجة تسوس الأسنان غير المعالج، أو الإصابة، أو الإجراءات السنية الفاشلة. تمثل هذه الخراجات مخاطر كبيرة، بما في ذلك الألم الشديد والمضاعفات المهددة للحياة مثل التهابات العنق العميقة. يتطلب علاجها نهجًا متعدد التخصصات يشمل أطباء الأسنان، والصيدلة، والممرضين.

الهدف: تقييم الأسباب، وعلم الأوبئة، والتشخيص، واستراتيجيات إدارة الخراجات السنية، مع التركيز على الأدوار التعاونية للطبيب، والصيدلي، والممرضين في مكافحة العدوى.

الطرق: تم إجراء مراجعة شاملة استكشفت الأسباب، وعلم الأوبئة، والفيزيولوجيا المرضية للخراجات السنية. تم فحص أدوات التشخيص، وتقنيات التصوير، واستراتيجيات العلاج، بما في ذلك التدخلات الصيدلانية. تم تسليط الضوء على مساهمة أطباء الأسنان، والصيدلة، والممرضين في رعاية المرضى وتعليمهم.

النتائج: عادة ما تنتج الخراجات السنية عن غزو بكتيري بسبب تدهور تكامل المينا. ينتشر الخراج بشكل كبير بين الأفراد الذين يعانون من سوء نظافة الفم، أو محدودية الوصول إلى العناية السنية، أو الضعف الجهازي. تعتبر أدوات التشخيص مثل التصوير والاختبارات المعملية أساسية لتحديد شدة العدوى. يشمل العلاج تصريف الخراج، والمضادات الحيوية، والتعليم المستهدف. تظل العلاجات التي تعتمد على البنسلين، وغالبًا ما يتم دمجها مع المترونيدازول، هي المعيار؛ ومع ذلك، فقد أدت المقاومة إلى ضرورة استخدام بدائل أوسع طيفًا مثل الأموكسيسيسيلين-كلافولانات وكلينداميسين.

الخلاصة: يتطلب إدارة الخراج السني التدخلات في الوقت المناسب، وتحديد نظام علاجي للمضادات الحيوية مناسب، وتعليم المرضى حول نظافة الفم. يعد معالجة التفاوتات الجهازية في الوصول إلى العناية السنية أمرًا بالغ الأهمية لتقليل انتشار الخراجات ومضاعفاتها. تضمن الجهود التعاونية بين المتخصصين في الرعاية الصحية علاجًا فعالًا والوقاية.

الكلمات المفتاحية: الخراج السني، نظافة الفم، المضادات الحيوية، التمرريض، الصيدلي، الرعاية التعاونية، إدارة العدوى