

Comparative Evaluation of Oflo­melid in the Prevention of Postoperative Complications in Destructive Appendicitis: A Clinical Study

Alymbek Tabaldyev^{*}, Maksatbek Tazhibaev, Kylychbek Mamasharipov, Adalat Ganieva, Nurlanbek Shamshiev, Zhanibek Kutuev, Zairova Indira, Ydyrysov Ismatilla

Received: 27 January 2026 / Received in revised form: 20 April 2026, Accepted: 24 April 2026, Published online: 25 May 2026

Abstract

Surgical site infection after appendectomy surgery is one of the most important postoperative complications of patients with destructive appendicitis, especially gangrenous and perforated appendicitis. Inflammatory phase of wound healing is when conventional topical agents employed in wound management may not be entirely effective to achieve adequate antimicrobial effect, and are lacking in adequate analgesic effect. Combined water-soluble ointment ofloxacin, methyluracil, and lidocaine (Oflo­melid) can help to promote local wound management and minimize postoperative complications. This study included patients suffering from destructive appendicitis, and the authors wanted to compare the effectiveness of treating them with Oflo­melid rather than the standard therapy with local antibiotics in preventing any complications after surgery and in promoting

wound healing. A total of 142 patients who were diagnosed with destructive appendicitis were included in a comparative clinical study. Group 1 (n=68) was treated with intravenous antibiotic therapy and topical Oflo­melid therapy, while Group 2 (n=74) was treated with standard local therapy. Clinical outcomes were assessed using the leukocyte intoxication index, bacteriological findings, wound healing progression, and postoperative complications. Following treatment with Oflo­melid, patients showed quicker cleansing of the wound, reduction of bacterial contamination earlier than the control group, and granulation formation earlier than the control group. Gene expression was significantly decreased on postoperative day 7 (1.4 ± 0.2 vs. 2.1 ± 0.3 , $p < 0.01$) for the leukocyte intoxication index. The pathogenic microflora were eliminated in the Oflo­melid group (5.4 ± 0.6 days) compared to the standard therapy group (8.2 ± 0.9 days). The postoperative wound complication was decreased from 12.2% to 4.4%.

Alymbek Tabaldyev^{*}

Department of Public Health and Preventive Medicine, Medical Faculty, Osh State University, Osh, Kyrgyzstan.

Maksatbek Tazhibaev, Kylychbek Mamasharipov

Department of Hospital Surgery, Medical Faculty, Osh State University, Osh, Kyrgyzstan.

Adalat Ganieva

Department of Pediatrics and Pediatric Infectious Diseases, Medical Faculty, Osh State University, Osh, Kyrgyzstan.

Nurlanbek Shamshiev

Department of Pediatric Surgery and Related Pediatric Disciplines, Medical Faculty, Osh State University, Osh, Kyrgyzstan.

Zhanibek Kutuev

Department of Obstetrics, Gynecology and Surgical Disciplines, Medical Faculty, Osh State University, Osh, Kyrgyzstan.

Zairova Indira

Department of Epidemiology and Microbiology with a Course of Infectious Diseases, Medical Faculty, Osh State University, Osh, Kyrgyzstan.

Ydyrysov Ismatilla

Department of General and Faculty Surgery, Medical Faculty, Osh State University, Osh, Kyrgyzstan.

***E-mail:** atabaldyev@oshsu.kg



© 2026 The Author(s). This is an **Open Access** article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0).
<https://creativecommons.org/licenses/by/4.0/deed.en>

Keywords: Appendicitis, Oflo­melid, Surgical site infection, Wound healing, Postoperative complications

Introduction

Surgical site infection (SSI) is one of the most frequent postoperative complications worldwide and continues to happen to millions of patients per year. The World Health Organization (WHO) estimates that around 11% of people have a surgical site infection after surgery in low- and middle-income countries (LMICs) (World Health Organization, n.d.). A study of over 729,000 appendectomies from 49 countries showed a worldwide incidence of SSI of 7% following appendectomy, and a rate of 11.1% in low-income countries, and >12% in Africa (Danwang *et al.*, 2020). If an incision is made and infected or if the appendix has been perforated or destroyed, the incidence of wound infection may reach 34%, and this can lead to longer hospital stays, higher cost of care, and an increased risk for surgical complications. Despite being one of the most challenging surgical conditions because of the ease of microbial resistance to antibiotics and the length of wound healing, treatment of purulent wounds continues to be one of the most significant problems in modern surgical practice (Suzuki *et al.*, 2025). Patients with destructive appendicitis (gangrenous and perforated appendicitis) have a high incidence of postoperative complications associated with these

conditions, which significantly reduce the treatment outcomes, such as surgical site infection, infiltrates, and wound suppuration. The critical period for infection is during the inflammatory phase of wound healing, when purulent exudate, oedema, tissue necrosis, and the presence of bacteria are high (Saraf *et al.*, 2025). The traditional fat-based ointments are seldom used in the first phase of wound healing since they create a “greenhouse effect”, preventing proper drainage of the wound. In the modern approaches towards local therapy, water-soluble multi-component preparations are increasingly gaining importance, which simultaneously act against microbial contamination, inflammation, and accelerate the healing process. Ofloxacin + Methyluracil + Lidocaine is known as Ofloamelid. The drug is comparatively promising to prevent postoperative complications and treat infected wounds after appendectomy in patients with destructive appendicitis, thanks to its antimicrobial, wound healing, and pain relief effects (Sadraei-Moosavi *et al.*, 2017).

Although the surgical treatment and the use of antibacterial drugs have improved, postoperative complications still pose a major clinical challenge in destructive appendicitis (Alam *et al.*, 2020). Post-operative wound infection following Appendectomy leads to a delay in healing, extended hospital stays, multiple wound changeovers, and patient discomfort. Wound complications occur with contamination of the operating field with pathogenic microflora that occurs when the destroyed appendix is removed (Leandri *et al.*, 2025). One of the biggest challenges in treating purulent wounds is the development of microbial biofilms, which is a major reason for the inefficient antibiotic treatment and the procedure of wound sanitation (Siddiqui *et al.*, 2022). Furthermore, local wound care procedures are not always effective in controlling the level of pain during dressing change and do not always target all stages of the wound process. Both purulent exudate and inflammatory infiltration can drag out the first phase of wound healing and slow down granulation tissue formation (Shen *et al.*, 2025). There is an important direction in developing local therapy in using modern, locally available broad spectrum antimicrobial water soluble ointments. It is hypothesized that the use of multi-purpose ointments, such as those containing antibacterial, anti-inflammatory, regenerative, and anti-pain action, would hasten the cleansing of wounds as well as provide reduction of intoxication and prevention of postoperative suppuration in patients suffering from destructive appendicitis (Liu *et al.*, 2024).

This study aims to compare the effectiveness of Ofloamelid for preventing the complications following surgery for destructive appendicitis. As the object of research, the use of a complex postoperative treatment, including combined water-soluble ointment ofloxacin, methyluracil, and lidocaine, for clinical purposes was considered (Constantin *et al.*, 2022; Mojsak *et al.*, 2022; Essah *et al.*, 2024; Frost *et al.*, 2024; Kajanova & Badrov, 2024; Lee & Ferreira, 2024; Rosellini *et al.*, 2024; Umarova *et al.*, 2024). The novelty of the study is the use of multiple indicators of wound healing in one time leukotoxic index of blood, bacteriological clearance of wounds, formation of granulation tissue, occurrence of purulent discharge, and postoperative complications. A comparative analysis was made of the patients treated with Ofloamelid with standard local therapy. We added

emphasis to our study of the role of Ofloamelid in promoting a quick shift from the inflammatory to the regeneration stage of the wound healing process. Ofloxacin is used for the antimicrobial activity of common pathogens involved in hospital infections, while methyluracil is used as an anti-inflammatory to stimulate the reparative processes, and lidocaine is used to ensure less pain during dressing. When taken together, these effects could enhance compliance in patients and help shorten the post-operative wound treatment regime. The study also investigates the ability of Ofloamelid to decrease the occurrence of wound suppuration and inflammatory infiltrates in cases of destructive appendicitis, a significant complication in abdominal surgery (Genc *et al.*, 2023; Ku *et al.*, 2023; Simonyan *et al.*, 2023; Tsiganock *et al.*, 2023; Delcea *et al.*, 2024; Ribeiro *et al.*, 2024; Sanlier & Yasan, 2024; Uneno *et al.*, 2024).

Materials and Methods

Of these patients, 142 patients with destructive appendicitis were obtained. Patients were sorted into two groups according to the method of local postoperative wound treatment. The first group consisted of 68 patients who were given the local application with Ofloamelid ointment, in addition to intravenous antibiotic treatment. The mean age of patients in this group was 58.4 ± 5.3 years; 32 (47.1%) were men, and 36 (52.9%) were women. The second group comprised 74 patients who were given antibiotics as an infusion, standard therapy, and local treatment with Prontosan solution. The mean age of patients in this group was 61.8 ± 4.9 years, including 40 (54.1%) men and 34 (45.9%) women. Intergroup differences in age and sex composition were statistically insignificant. The study included adult patients aged 18–70 years diagnosed with acute destructive appendicitis, including phlegmonous, gangrenous, and perforated forms, accompanied by peritonitis. Patients in the first phase (PURULENT – NECROSAL) of the wound process, with the presence of edema, hyperemia, purulent exudate, and pain syndrome in their wound, were included in the study (Al Abadie *et al.*, 2023; Guzek *et al.*, 2023; Simonyan *et al.*, 2023).

The subjective criteria of exclusion included individual intolerance of the drug components (ofloxacin, lidocaine, and methyluracil), decompensated diabetes mellitus, end-stage renal or hepatic insufficiency, patients needing only systemic intensive treatment, without the examination of local treatment of the wound, irradiated skin, and syphilitic lesions. The following were the exclusion criteria: decompensated diabetes mellitus, end-stage renal or hepatic insufficiency, age below 18 years, pregnancy or lactation, individual intolerance of the drug components (Lidocaine, Methyluracil, ofloxacin), and patients with tuberculosis or syphilitic lesions in the wound area, for whom only systemic intensive therapy was required, without a local treatment assessment. Sterile gauze dressings were loosely filled into the cavity of the wound, or in case of a closed wound, dressings were immediately applied after the surgery, and ointment of Ofloamelid was applied to the wound. Dressings were changed daily or once every 2 days, depending on the severity of suppuration. Routine postoperative observation and systemic antibacterial therapy were carried out in all patients (Oran & Azer, 2023; Lee *et al.*, 2023;

Ncube *et al.*, 2023; Szklenner *et al.*, 2023; Tsvetkova *et al.*, 2023; Ceylan *et al.*, 2024; Maralov *et al.*, 2024).

The evaluation of the postoperative wound process, the intensity of inflammation, the reduction of purulent discharge, the appearance of granulation tissue, and the tendency to postoperative complications were applied for clinical assessment. Laboratory tests comprised the leukocyte intoxication index (Kalif-Kalif), the cytological examination of the wound discharge, and the bacteriological examination of the microflora of the wound and evaluation of the antimicrobial sensitivity. The effectiveness of the treatment was compared by dynamic clinical observation in the postoperative period.

The study was conducted in accordance with accepted ethical standards for clinical research and the principles of the Declaration of Helsinki (World Medical Association, 2013). All patients were informed about the purpose and methods of the study before inclusion. Confidentiality of patient information was maintained throughout the study period. Clinical examinations, postoperative observations, and laboratory investigations were performed according to standard surgical and institutional protocols approved by Osh State University, Osh City, Kyrgyzstan.

Results and Discussion

142 patients with destructive appendicitis were enrolled in the study. Sixty-eight patients formed Group 1, receiving IV antibiotics along with local Oflomelid ointment treatment, and 74 patients formed Group 2, which was administered IV antibiotic treatment with local standard treatment. The age and sex composition of the groups was not significantly different.

Comparative Characteristics of the Study Groups

142 patients were enrolled in the study and allocated into two groups for comparison of effectiveness in local treatment. The mean age of patients in Group 1 was 58.4 ± 5.3 years, while in Group 2 it was 61.8 ± 4.9 years. Men accounted for 47.1% ($n=32$) in Group 1 and 54.1% ($n=40$) in Group 2, whereas women accounted for 52.9% ($n=36$) and 45.9% ($n=34$), respectively. Patients in Group 1 received Oflomelid ointment local treatment, and Group 2 received standard local treatment (Table 1).

Table 1. Characteristics of patient groups

Parameter	Group 1 (Oflomelid)	Group 2 (Standard)
Number of patients (n)	68	74
Mean age (years)	58.4 ± 5.3	61.8 ± 4.9
Men, % (pers.)	47,1% (32)	54,1% (40)
Women, % (pers.)	52,9% (36)	45,9% (34)
Local treatment	with Oflomelid (ointment)	Povidone- iodine/Levomekol

Dynamics of Bacteriological Research

The cleansing of a wound from pathogenic microflora was more rapid in patients who had been treated with Oflomelid. The bacterial contamination initially was between 10^7 and 10^8 CFU/g

in both groups. The bacterial counts in both groups were reduced below the critical level (10^5 microbial bodies/cm²) but required 3.2 days (1.7 days) and 5.1 days (1.7 days), respectively, in both groups. Pathogenic microflora were completely removed after 5.4 ± 0.6 days of incubation in Group 1 and after 8.2 ± 0.9 days of incubation in Group 2 (Table 2).

Table 2. Terms of microflora elimination from the wound (day)

Group	Initial contamination (CFU/g)	Decline below crit. level (10^5)	Complete elimination
Group 1 (Oflomelid)	107 -108	3.2 ± 0.4 days	5.4 ± 0.6 days
Group 2 (Standard)	107 -108	5.1 ± 0.7 days	± 0.9 days

Leukocyte Intoxication Index (LII)

Leukocyte intoxication index (LII) indicated the degree of endogenous intoxication as well as the effectiveness of local wound treatment (Figure 1). At admission, LII values were 4.2 ± 0.5 in Group 1 and 4.4 ± 0.6 in Group 2 ($p > 0.05$). On postoperative day 3, the index decreased to 2.8 ± 0.3 in Group 1 and 3.6 ± 0.4 in Group 2 ($p < 0.05$). By postoperative day 7, LII values decreased to 1.4 ± 0.2 in Group 1 and 2.1 ± 0.3 in Group 2 ($p < 0.01$) (Table 3).



a)



b)

Figure 1. Use of antiseptics based on surfactants Oflomelid:
a) before treatment;b) after treatment and ofloxacin.

Table 3. LII dynamics (by Kalf-Kalif)

Follow-up period	Group 1 (n=68)	Group 2 (n=74)	P-value
On admission	4,2 ± 0,5	4,4 ± 0,6	>0,05
3 rd day	2,8 ± 0,3	3,6 ± 0,4	<0,05
7 th day	1.4 ± 0.2	2.1 ± 0.3	<0.01

Effectiveness of Prevention of Complications

The incidence of wound complications after surgery was lowered with Oflomelid. The infiltrates and suppuration of the wound were seen in 4.4% out of 3 patients in Group 1 versus 12.2% out of 9 patients in Group 2. Along with the above, in the postoperative observation period, patients receiving Oflomelid exhibited more rapid reduction in inflammation, earlier wound cleansing, granulation tissue formation, and decreased wound discharge. The chart below (**Figure 2**) shows the postoperative complication rate (%).

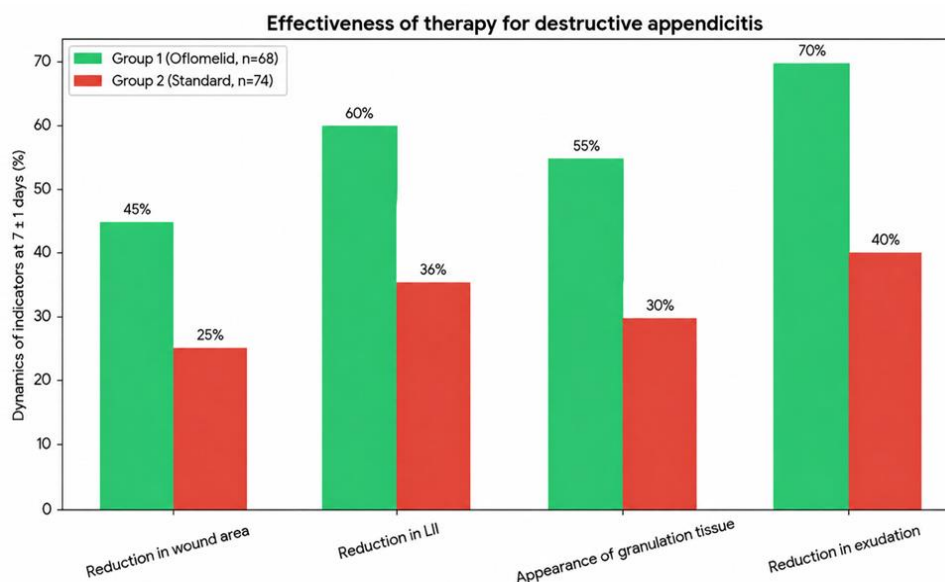


Figure 2. The results of reducing the wound area, reducing the leukocyte intoxication index, the appearance of granulation, and reducing the amount of discharge from the wound on 7day 7 in % of patients (compiled by the authors).

The results of the present study demonstrated that the use of Oflomelid in the complex treatment of destructive appendicitis was associated with faster wound cleansing, earlier reduction of bacterial contamination, lower leukocyte intoxication index values, and decreased frequency of postoperative wound complications compared with standard local therapy. These findings are consistent with previously published studies emphasizing the effectiveness of multicomponent water-soluble ointments in the management of purulent wounds and prevention of postoperative infections. The treatment of postoperative purulent wounds remains a difficult problem in surgery because of microbial resistance, prolonged inflammation, and the formation of bacterial biofilms. As noted by A Hosseinkhani *et al.* (2016), traditional fat-based ointments are less effective during the inflammatory phase of wound healing because they create a “greenhouse effect” that interferes with adequate drainage of wound exudate. In the present study, patients treated with Oflomelid demonstrated earlier wound cleansing and reduction of purulent discharge, which may be associated with the water-soluble polyethylene oxide base of the ointment (Hosseinkhani *et al.*, 2017).

The bacteriological findings of this study also support the antimicrobial effectiveness of Oflomelid. In the main group, the level of bacterial contamination decreased below the critical level by 3.2 ± 0.4 days compared with 5.1 ± 0.7 days in the control group. Complete elimination of pathogenic microflora occurred earlier in patients treated with Oflomelid. Similar observations were reported by B Heydari *et al.* (2025), who demonstrated that the combination of ofloxacin, methyluracil, and lidocaine provides effective suppression of hospital microflora and accelerates wound healing. A significant reduction of the leukocyte intoxication index was observed in the Oflomelid group during postoperative follow-up. By postoperative day 7, the LII value decreased to 1.4 ± 0.2 compared with 2.1 ± 0.3 in the control group. These findings indicate a more rapid reduction of endogenous intoxication and inflammatory activity. Similar conclusions were described by P Shalchi-Amirkhiz *et al.* (2023), who reported that methyluracil-containing preparations accelerate epithelialization and reduce inflammatory manifestations during wound healing.

The reduction in postoperative infiltrates and wound suppuration observed in this study is also supported by previous investigations. One of the pivotal clinical benefits achieved in the present study was the effect that it has on pain during dressing procedures. After

dressings changes, patients treated with Oflo-melid experienced relief from pain; this could have been related to the lidocaine in the composition of the ointment. It has also been proposed that lidocaine would cause an instant local anesthetic effect and promote compliance from patients under treatment for purulent wounds by Francesca Brasch *et al.* (2017). The present study demonstrated a faster transition from the inflammatory stage to the regeneration stage as well, which is in line with the results of L Yu *et al.* (2025) that showed the effectiveness of modern water-stable ointments in early postoperative wound care. Therefore, Oflo-melid is conclusively proven to be an effective local therapeutic agent in patients who have destructive appendicitis in the present study. It has antibacterial, regenerative, dehydrating, and analgesic action, which helps to speed up the healing of wounds and prevent infectious complications after surgery. These results suggest that the use of multi-component water-soluble ointments is effective in both the prevention and cure of postoperative wound infection in abdominal surgery.

Future Recommendations

The prevention of postoperative complications in destructive appendicitis remains an important challenge in abdominal surgery. This study showed promising results using Oflo-melid, but more clinical and lab studies are needed to enhance the treatment of the local wound and to provide better post-surgical management in surgical infections with purulent drainage.

Large-Scale Clinical Studies

Further multicenter studies involving a larger number of patients are recommended to confirm the clinical effectiveness of Oflo-melid in the prevention of postoperative complications after appendectomy for destructive appendicitis (Siddiqui *et al.*, 2024).

Comparative Evaluation with Other Topical Agents

Further comparative studies are needed to assess the efficacy of Oflo-melid in comparison to other modern water-soluble ointments/combination antiseptics employed in the local treatment of wounds (Soliman *et al.*, 2025).

Long-Term Postoperative Follow-Up

Long-term postoperative outcomes like the length of wound healing, the recurrence of wound infection, and the length of hospital stay in patients who were treated with Oflo-melid therapy should also be evaluated in future studies (StatPearls Publishing, n.d.).

Microbiological Monitoring

More bacterial analysis should be performed to explore the alterations of wound microflora and antibiotic sensitivity in patients who develop wound infection following appendicitis and who have destructive appendicitis (Song *et al.*, 2018).

Optimization of Local Treatment Protocols

To minimize the possibility of surgical site infection and optimize patient recovery, future studies should enhance the postoperative wound management system with multicomponent preparations

that have antibacterial, regenerative, and analgesic activity (Millán-Reyes *et al.*, 2025).

Conclusion

In abdominal surgery, the treatment of the purulent post-operative wounds in cases of destructive appendicitis still represents an important problem, as wound infection, inflammatory infiltrates, and delayed healing pose a high risk of occurrence. The results of the present study showed that the complex treatment of destructive appendicitis with the use of Oflo-melid significantly promotes the operation's postoperative wound healing and decreases the rate of infectious complications, compared with local therapy of the operation. In the patients treated with the use of Oflo-melid, wound cleansing was faster, bacterial contamination decreased earlier, granulation tissue appeared earlier, and there were lower values of leukocyte intoxication index. Moreover, the incidence of postoperative wound suppuration and infiltrates was also less in the main group as compared to the cases treated with standard therapy. The combination of three components that make up Oflo-melid, namely ofloxacin, methyluracil, and lidocaine, may help to explain the effectiveness of the drug. Ofloxacin has a broad-spectrum mechanism of action to combat effective organisms associated with hospital infections, methyluracil enhances reparative and regenerative processes, and lidocaine has a local analgesic effect during dressings. It is especially crucial during the inflammatory phase of the healing journey for the use of the water-soluble ointments to have a beneficial effect by draining purulent exudates well and not creating the 'greenhouse' effect like fat-based ointments. Once the wound has been thoroughly cleaned and active granulation is present, local agents of a lower osmotically active solution should be used to avoid over-drying newly-formed tissue. Based on the results of the study, it is possible to recommend Oflo-melid as a local therapeutic agent with a high efficacy in the prevention and treatment of postoperative complications in destructive appendicitis that could be used in surgical practice as a part of комплекс postoperative wound management.

Acknowledgments: All authors would like to thank Osh State University for providing the support and research infrastructure.

Conflict of interest: None

Financial support: None

Ethics statement: The study was approved by the Ethical Review Board of Osh State University, Osh City, Kyrgyzstan, and was conducted in accordance with the principles of the Declaration of Helsinki and institutional ethical guidelines for clinical research involving human participants. All patients included in the study underwent standard diagnostic and therapeutic procedures for destructive appendicitis, and oral informed consent was obtained before participation in the study. Patient confidentiality and anonymity were maintained throughout the research process. The corresponding author may be contacted for further information regarding ethical approval and study procedures.

References

- Al Abadie, M., Sharara, Z., Ball, P. A., & Morrissey, H. (2023). Pharmacological insights into Janus kinase inhibition for the treatment of autoimmune skin diseases: A literature review. *Annals of Pharmacy Practice and Pharmacotherapy*, 3, 1–8. doi:10.51847/lhABjfulwh
- Alam, A., Siddiqui, M. F., Imam, N., Ali, R., Mushtaque, M., & Ishrat, R. (2020). Covid-19: Current knowledge, disease potential, prevention and clinical advances. *Turkish Journal of Biology*, 44(Special Issue 1), 121–131. doi:10.3906/biy-2005-29
- Braschi, F., Bartoli, F., Bruni, C., Fiori, G., Fantauzzo, C., Paganelli, L., De Paulis, A., Rasero, L., & Matucci-Cerinic, M. (2017). Lidocaine controls pain and allows safe wound bed preparation and debridement of digital ulcers in systemic sclerosis: A retrospective study. *Clinical Rheumatology*, 36(1), 209–212. doi:10.1007/s10067-016-3414-7
- Ceylan, M. F., Basal, M., & Gayretli, S. (2024). Impact of digital burnout on consumer perceptions of online shopping. *Asian Journal of Individual and Organizational Behavior*, 4, 7–14. doi:10.51847/D1BR4edNsN
- Constantin, V. D., Silaghi, A., Epistatu, D., Dumitriu, A. S., Paunica, S., Bălan, D. G., & Socea, B. (2022). Diagnostic and therapeutic insights into colorectal carcinoma. *Archives of International Journal of Cancer and Allied Sciences*, 2(1), 24–28. doi:10.51847/HojLmKBDvP
- Danwang, C., Bigna, J. J., Tochie, J. N., Mbonda, A., Mbanga, C. M., Nzalio, R. N. T., Guifo, M. L., & Essomba, A. (2020). Global incidence of surgical site infection after appendectomy: A systematic review and meta-analysis. *BMJ Open*, 10(2), e034266. doi:10.1136/bmjopen-2019-034266
- Delcea, C., Gyorgy, M., Siserman, C., & Popa-Nedelcu, R. (2024). Impact of maladaptive cognitive schemas on suicidal behavior in adolescents during the COVID-19 pandemic: A predictive study. *International Journal of Social Psychology Aspects of Healthcare*, 4, 42–46. doi:10.51847/EHCf9HzLEP
- Essah, A., Igboemeka, C., & Hailemeskel, B. (2024). Exploring gabapentin as a treatment for pruritus: A survey of student perspectives. *Annals of Pharmacy Education, Safety, Public Health and Advocacy*, 4, 1–6. doi:10.51847/h8xgEJE3NE
- Frost, N., Deckert, P. M., Nolte, C. H., Kohl, R., & Schreiber, S. J. (2024). Challenges and strategies in recruiting patients for a trial on patient-centered navigation in age-associated diseases. *Annals of Pharmacy Education, Safety, Public Health and Advocacy*, 4, 50–62. doi:10.51847/BLHlqwTFT
- Genc, A., Isler, S. C., Oge, A. E., & Matur, Z. (2023). Impact of sagittal split osteotomy combined with Medpor® porous polyethylene implant on masticatory reflex. *Journal of Current Research in Oral Surgery*, 3, 6–11. doi:10.51847/7zuNKnpXB
- Guzek, K., Stelmach, A., Rożnowska, A., Najbar, I., Cichocki, L., & Sadakierska-Chudy, A. (2023). A preliminary investigation of genetic variants linked to aripiprazole-induced adverse effects. *Annals of Pharmacy Practice and Pharmacotherapy*, 3, 40–47. doi:10.51847/ZT28xcs95J
- Heydari, B., Basiratian, A., Hoseinzade, F., Kargar, S., Ramezani, V., Zahmatkesh, A., & Saghafi, F. (2025). Efficacy of topical moxifloxacin on therapeutic laparoscopy-induced wound healing: a double-blind, randomized clinical trial. *BMC Surgery*, 25(1), 198. doi:10.1186/s12893-025-02932-7
- Hosseinkhani, A., Falahatzadeh, M., Raoofi, E., & Zarshenas, M. M. (2017). An evidence-based review on wound healing herbal remedies from reports of traditional Persian medicine. *Journal of Evidence-Based Complementary & Alternative Medicine*, 22(2), 334–343. doi:10.1177/2156587216654773
- Kajanova, J., & Badrov, A. (2024). Medical students' perspectives on trust in medical AI: A quantitative comparative study. *Asian Journal of Ethics in Health and Medicine*, 4, 44–57. doi:10.51847/36mpdZ9AZ8
- Ku, J. K., Um, I. W., Jun, M. K., & Kim, I. H. (2023). Clinical management of external apical root resorption using amniotic membrane matrix and Bio-Dentine. *Journal of Current Research in Oral Surgery*, 3, 1–5. doi:10.51847/IOSwt6Qzpv
- Leandri, M., Vallicelli, C., Santandrea, G., Perrina, D., Bravi, F., Sartelli, M., Coccolini, F., Ansaloni, L., Agnoletti, V., & Catena, F. (2025). Postoperative infections after appendectomy for acute appendicitis: The surgeon's checklist. *Antibiotics*, 14(9), 954. doi:10.3390/antibiotics14090954
- Lee, M. J., & Ferreira, J. (2024). COVID-19 and children as an afterthought: Establishing an ethical framework for pandemic policy that includes children. *Asian Journal of Ethics in Health and Medicine*, 4, 1–19. doi:10.51847/haLKYCQorD
- Lee, S., Kim, J., & Byun, G. (2023). The interplay of political skill, ethical leadership, and leader-member exchange in shaping work outcomes. *Annals of Organizational Culture, Leadership and External Engagement Journal*, 4, 45–53. doi:10.51847/vAKE892Paf
- Liu, W., Khalid, M., Wahab, S., Faizan Siddiqui, M., Hasan Khan, S., Sadiq, M., & Khatoon, Z. (2024). A multitier virtual screening study of phytoconstituents as Myeloid Cell Leukemias 1 inhibitors. *Journal of Biomolecular Structure and Dynamics*, 42(10), 5219–5228. doi:10.1080/07391102.2023.2226739
- Maralov, V. G., Sitarov, V. A., Koryagina, I. I., Kudaka, M. A., Smirnova, O. V., & Romanyuk, L. V. (2024). Neuropsychological and personal factors influencing students' attitudes toward hazards. *Asian Journal of Individual and Organizational Behavior*, 4, 34–43. doi:10.51847/GmDL98vb2E
- Millán-Reyes, M. J., Afanador-Restrepo, D. F., Carcelén-Fraile, M. d. C., Aibar-Almazán, A., Sánchez-Alcalá, M., Cano-Sánchez, J., Mesas-Aróstegui, M. A., & Castellote-Caballero, Y. (2025). Reducing infections and improving healing in complex wounds: A systematic review and meta-analysis. *Journal of Clinical Medicine*, 14(9), 3237. doi:10.3390/jcm14093237
- Mojsak, D., Dębczyński, M., Kuklińska, B., & Mróz, R. M. (2022). Ewing's sarcoma in a 58-year-old man: Challenges

- of cancer diagnosis during the COVID-19 era. *Archives of International Journal of Cancer and Allied Sciences*, 2(1), 37–41. doi:10.51847/J1EMRn8tE2
- Ncube, M., Sibanda, M., & Matenda, F. R. (2023). The influence of AI and the pandemic on BRICS nations: South Africa's economic performance during crisis. *Annals of Organizational Culture, Leadership and External Engagement Journal*, 4, 17–24. doi:10.51847/lrMvYTE3OF
- Oran, I. B., & Azer, O. A. (2023). The evolution of Turkey's role in international development: A globalization perspective. *Annals of Organizational Culture, Leadership and External Engagement Journal*, 4, 1–8. doi:10.51847/oNOPb4T9g1
- Ribeiro, A., Martins, S., & Fonseca, T. (2024). Progress and gaps in national medicines policy implementation in SADC member states: A comprehensive desktop review. *Interdisciplinary Research in Medical Sciences Specialty*, 4(1), 42–56. doi:10.51847/0eVBxAl8y0
- Rosellini, E., Giordano, C., Guidi, L., & Cascone, M. G. (2024). Creation of a novel surgical suture material designed to inhibit arterial thrombosis formation. *Journal of Medical Science Interdisciplinary Research*, 4(1), 1–7. doi:10.51847/7denx72Xde
- Sadraei-Moosavi, S.-M., Nikhakhsh, N., & Darzi, A. (2017). Postoperative antibiotic therapy after appendectomy in patients with non-perforated appendicitis. *Caspian Journal of Internal Medicine*, 8(2), 104–107. doi:10.22088/cjim.8.2.104
- Sanlier, N., & Yasan, N. (2024). Exploring the link between COVID-19 and vitamin D: A concise overview. *Interdisciplinary Research in Medical Sciences Specialty*, 4(1), 23–32. doi:10.51847/skW1PmtWeB
- Sarafi, M., Azimi, B., Karimian, M., & Ebrahimsaraj, G. (2025). Incidence and risk factors for post-appendectomy emergency surgical site infections. *Bulletin of Emergency and Trauma*, 13(3), 153–157. doi:10.30476/beat.2025.106191.1582
- Shalchi-Amirkhiz, P., Bensch, T., Proschmann, U., Stock, A. K., Ziemssen, T., & Akgün, K. (2023). Pilot study on the influence of acute alcohol exposure on biophysical parameters of leukocytes. *Frontiers in Molecular Biosciences*, 10, 1243155. doi:10.3389/fmolb.2023.1243155
- Shen, A. Z., Taha, M., Ghannoum, M., & Tying, S. K. (2025). Biofilms and chronic wounds: Pathogenesis and treatment options. *Journal of Clinical Medicine*, 14(21), 7784. doi:10.3390/jcm14217784
- Siddiqui, F., Aslam, D., Tanveer, K., & Soudy, M. (2024). The role of artificial intelligence and machine learning in autoimmune disorders. In *Studies in Computational Intelligence* (Vol. 1133, pp. 61–75). Springer Science and Business Media Deutschland GmbH. doi:10.1007/978-981-99-9029-0_3
- Siddiqui, M. F., Azaroual, M., Nicolas, G., Rahat, S. A. A., Mitalipova, A., Emmanuel, N., & Tashmatova, N. (2022). Computational intelligence: A step forward in cancer biomarker discovery and therapeutic target prediction. In *Studies in Computational Intelligence* (Vol. 1016, pp. 233–250). Springer Science and Business Media Deutschland GmbH. doi:10.1007/978-981-16-9221-5_14
- Simonyan, R., Babayan, M., Yekmalyan, H., Alexanyan, A., Simonyan, G., Alexanyan, S., Darbinyan, L., Simonyan, K., & Simonyan, M. (2023). Identification and extraction of superoxide-generating protein assemblies from *Helianthus tuberosus*, *Daucus sativus*, and *Solanum tuberosum*. *Specialty Journal of Pharmacognosy, Phytochemistry and Biotechnology*, 3, 15–20. doi:10.51847/Vj5MeBCeDs
- Soliman, M. A. N., Garg, S., Harkova, L. G., & McCarthy, R. R. (2025). Comparative study of common over-the-counter wound care products against early and mature biofilms of antibiotic-resistant wound pathogens. *JAC-Antimicrobial Resistance*, 7(6), dlaf233. doi:10.1093/jacamr/dlaf233
- Song, D. W., Park, B. K., Suh, S. W., Lee, S. E., Kim, J. W., Park, J. M., Kim, H. R., Lee, M.-K., Choi, Y. S., Kim, B. G., et al. (2018). Bacterial culture and antibiotic susceptibility in patients with acute appendicitis. *International Journal of Colorectal Disease*, 33(4), 441–447. doi:10.1007/s00384-018-2992-z
- StatPearls Publishing. (n.d.). *Postoperative wound infections*. Retrieved May 25, 2026, from <https://www.ncbi.nlm.nih.gov/books/NBK560533/>
- Suzuki, K., Seki, C., Goshima, T., Yoshida, M., Nakashima, Y., Shiko, Y., Osawa, M., Kawasaki, Y., & Tanaka, Y. (2025). Risk factors for surgical difficulty in interval appendectomy for perforated appendicitis with abscess in children. *Pediatric Surgery International*, 41(1), 259. doi:10.1007/s00383-025-06157-w
- Szklener, K., Nieoczym, K., Niedziela, K., Światłowski, Ł., & Mańdziuk, S. (2023). Exceptional survival with lorlatinib in ALK-rearranged lung cancer: A case report. *Asian Journal of Current Research in Clinical Cancer*, 3(1), 1–5. doi:10.51847/DxGARc9jsQ
- Tsiganock, A. S., Bgantseva, A. E., Vostrikova, V. R., Shevel, D. S., Saidarova, A. I., Bekbuzarov, I. M., Kurbanov, T. K., & Shadova, S. M. (2023). Exploring the wound healing potential of aqueous extracts from Caucasus herbs in diabetes mellitus. *Specialty Journal of Pharmacognosy, Phytochemistry and Biotechnology*, 3, 31–38. doi:10.51847/Y5Fvcyw12s
- Tsvetkova, D., Vezekov, L., Ivanov, T., Danalev, D., & Kostadinova, I. (2023). Evaluation of cytotoxic activity of galantamine peptide esters: GAL-LEU and GAL-VAL against PC3 cell line. *Asian Journal of Current Research in Clinical Cancer*, 3(1), 24–33. doi:10.51847/V6Qg7e4512
- Umarova, M. S., Akhyadova, Z. S., Salamanova, T. O., Dzhamaaldinova, Z. I., Taysumova, Z. D., Bekmurzaeva, M. R., Tapaeva, M. M., & Ivanushkina, A. M. (2024). Influence of vibrations and other negative physical factors of production on protein metabolism and protein dynamics in the body. *Journal of Medical Science Interdisciplinary Research*, 4(1), 39–44. doi:10.51847/Jk38F1v5XH
- Uneno, Y., Morita, T., Watanabe, Y., Okamoto, S., Kawashima, N., & Muto, M. (2024). Assessing the supportive care needs of elderly cancer patients at Seirei Mikatahara General Hospital in 2023. *International Journal of Social Psychology Aspects of Healthcare*, 4, 13–19.

- doi:10.51847/o4njwxvRSF
- World Health Organization. (n.d.). *Infection prevention and control*. Retrieved May 25, 2026, from <https://www.who.int/teams/integrated-health-services/infection-prevention-control/surgical-site-infection>
- World Medical Association. (2013). World Medical Association Declaration of Helsinki: Ethical principles for medical research involving human subjects. *JAMA*, 310(20). doi:10.1001/jama.2013.281053
- Yu, L., Lei, Y., & Yuan, K. (2025). Efficacy of wound care ointment in healing infectious wounds after anorectal surgery: A randomized controlled trial. *Medicine*, 104(4), e41347. doi:10.1097/MD.00000000000041347