



Emerging Infectious Diseases at the End of the Fourth Year of the COVID-19 Pandemic and Recent Updates on Colorectal and Pediatric Endocrine Diseases

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Marking the End of the Fourth Year of the COVID-19 Pandemic

The year 2023 marks the fourth year of the COVID-19 pandemic, which has brought about multifaceted changes in health, healthcare systems, social structures, the economy, culture, and housing worldwide. In Korea, quarantine measures have been lifted, except in certain group living facilities such as hospitals and some nursing homes, signaling a shift toward pre-pandemic routines. Nevertheless, the pandemic's impact on daily life persists. Online meetings have become the norm, and it is now commonplace to conduct lectures and workshops virtually. This practice is also prevalent among several editorial committees of academic journals. In summary, these changes have been implemented across various sectors of our society.

In 2023, as COVID-19 cases decreased, there was a notable increase in other infectious diseases. Specifically, influenza cases surged to 3.5 times the number reported in 2022, with 61.3 cases per 1,000 population in the 49th week of 2023 compared to 17.3 per 1,000 population in the same week of 2022 [1]. Additionally, instances of mycoplasma pneumonia more than tripled in 2022 [2]. An imported infectious disease, mpox, was detected in the country but remained contained, primarily affecting specific groups within the homosexual community [3]. In the realm of veterinary health, Korea saw the introduction of an infection caused by the lumpy skin disease virus in cows, which is transmitted by vectors [4]. Although the specific vectors present in the field have not been reported, laboratory studies have shown that *Aedes aegypti* mosquitoes, ixodid ticks (*Amblyomma hebraeum*, *Rhipicephalus appendiculatus*, and *Rhipicephalus [Boophilus] decoloratus*), biting flies (*Stomoxys calcitrans*), and horseflies (*Haematopota* spp.) can potentially act as vectors [5]. Consequently, it is presumed that the domestic introduction of the virus occurred through these infected vectors, as the mode of transmission is not airborne. This raises the concern that various mosquitoes, ticks, and flies native to Africa and the Middle East could potentially introduce not only cattle diseases but also human infections caused by vector-borne

viruses, bacteria, and parasites into Korea. Given the changing climate and Korea's shift towards a more subtropical environment, it is crucial for government surveillance and clinical practice to intensify monitoring of these vector-borne imported diseases. Without vigilant oversight, there is a risk that these diseases could become endemic as the vectors establish themselves domestically.

This issue of *Ewha Medical Journal* features a collection of insightful articles that explore significant advancements in the fields of colorectal surgery and pediatric endocrinology.

Advancements in Colorectal Surgery and Colorectal Cancers

Clinical guidelines for enhanced recovery following colorectal surgery have been introduced. A review published in this issue compares elements from two sets of guidelines: those of the Enhanced Recovery After Surgery (ERAS) Society and the American Society of Colon and Rectal Surgery [6]. Key elements of the ERAS guidelines include preoperative optimization, anemia management, antimicrobial prophylaxis, prevention of intraoperative hypothermia, and thromboprophylaxis. In contrast, the guidelines from the American Society of Colon and Rectal Surgery highlight preadmission orders and discharge criteria. This comparison acquaints readers with the current guidelines for improved postoperative recovery.

In the diagnosis of colorectal cancer, markers of the inflammatory response have become increasingly recognized as important prognostic tools. Elevated preoperative levels of the neutrophil-lymphocyte ratio, platelet-lymphocyte ratio, and C-reactive protein–albumin ratio have been identified as predictors of poor outcomes. Understanding these inflammatory markers is crucial for improving the management of colorectal cancer [7].

Five therapeutic approaches for colorectal cancer have been introduced. These include preoperative chemoradiotherapy for advanced local rectal cancer, transanal local excision for early-stage rectal cancer, cytoreductive surgery coupled with hyperthermic intraperitoneal chemotherapy for colorectal cancer with peritoneal metastases, and an examination of the impact of the COVID-19 pandemic on treatment modalities. These insights are invaluable for colorectal surgeons, patients, and their families.

Methods to prevent anastomotic leakages, a common complication of colorectal surgery, have been elucidated. These methods encompass intraoperative reinforcing sutures, the application of fluorescence angiography, transanal drainage, and the use of diverting stomas. The selection of these techniques should be tailored to each patient, taking into account specific risk factors and the clinical context [8].

Innovations in Pediatric Endocrinology

Four themes in pediatric endocrinology are discussed. The first theme is endocrine hypertension in children related to adrenal gland disorders. These disorders are categorized into three types: mineralocorticoid-related hypertension, which includes conditions such as primary aldosteronism, congenital adrenal hyperplasia, and apparent mineralocorticoid excess; glucocorticoid-related hypertension, exemplified by Cushing syndrome; and catecholamine-related hypertension, which encompasses pheochromocytoma and paraganglioma. Although these disorders are rare, they are significant causes of endocrine hypertension in children and require prompt investigation for swift diagnosis and appropriate treatment [9].

The second theme reviewed contemporary advancements in managing childhood Graves' disease, with a focus on emerging targeted therapies. Treatment options such as antithyroid drugs, radioactive iodine ablation, and thymectomy were compared, alongside ongoing research into the long-term outcomes of these approaches in pediatric patients. Considering the autoimmune nature of Graves' disease, which involves B and T lymphocytes and the thyroid-stimulating hormone receptor, research is being conducted on therapies targeting these pathways. Adequately sized randomized controlled trials are crucial to establish the efficacy of these novel treatments [10]. The third theme addressed Prader-Willi syndrome (PWS), a prevalent genetic cause of obesity. This syndrome occurs in approximately 1 out of every 10,000 to 30,000 births, making immediate diagnosis essential. Beyond obesity, the syndrome is associated with developmental delays, learning difficulties, and behavioral issues. The management of obesity in PWS is particularly challenging, which highlights the importance of early diagnosis for effective intervention [11].

PWS is caused by one of three genetic mechanisms: 65%–70% of cases are due to a paternal deletion of the 15q11.2–13 region of chromosome 15, 20%–30% result from maternal uniparental disomy, and 2%–5% are caused by imprinting defects or rearrangements. At the heart of PWS is the *SNORD116* gene located in the paternal chromosome 15 region; a deficiency in this gene leads to hypothalamic imbalances that manifest in typical PWS symptoms, such as abnormal eating and sleep patterns [12].

I trust that the recent advancements in colorectal surgery and pediatric endocrinology, as described above, will prove valuable to surgeons, pediatricians, and practicing physicians.

Appreciation to Authors and Reviewers

In my first year volunteering as the editor of the *Ewha Medical Journal*, I endeavored to publish a substantial number of manuscripts from various Korean medical societies. I am deeply grateful to the authors for their willingness to share their exceptional knowledge and expertise in their respective fields, as well as to the reviewers who generously dedicated their time to the journal. Looking ahead, I aim to attract and publish articles on more current and relevant topics that resonate with both the Korean and international medical communities.

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Conflict of Interest

Sun Huh has been an editor-in-chief of the *Ewha Medical Journal* since September 2023. However, he was not involved in the review process. No other potential conflict of interest relevant to this editorial was reported.

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Author Contribution

The article is prepared by a single author.

Ethics Approval and Consent to Participate

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