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TNFα antagonists, such as infliximab and adalimumab, are widely used for induction and maintenance of remission in pediatric patients with inflammatory bowel disease (IBD). Numerous studies in adult and pediatric patients have demonstrated that monitoring of anti-TNFα drug level improves various outcomes, especially in cases of primary non-response or loss-of-response. In this article we present the recommendations of the Israeli Pediatric Gastroenterology Association regarding measuring anti-TNFα drug and anti-drug levels in pediatric IBD patients. The recommendation to perform these studies will be provided only by a pediatric gastroenterologist based on clinical, laboratory, endoscopic or radiologic signs of active inflammation. We also recommend performing these studies once a year in patients with clinical and biochemical remission. We believe that implementing these recommendations will improve the care provided for pediatric patients with IBD. ●

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HOW HEALTH SERVICES IN ISRAEL COPED WITH THE POLIO EPIDEMIC OF THE 1950'S

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Today, the introduction of a new medicine or vaccine or the clinical trial of some new potion requires the approval of a variety of bodies in accordance with Helsinki Agreement rules, National Health Laws and Health Ministry regulations. The creation of the World Health Organization (WHO) in 1946 added another essential layer to the firm base of principles governing the conduct of clinical trials that exist today. Its main contribution was to create a new reality following The Second World War and the subsequent Nuremberg Trials. The Declaration of Helsinki was only adopted eighteen years later, in 1964.

In its first years of independence the infant State of Israel was attacked by a serious outbreak of polio which claimed many victims – mostly children and youngsters. Infantile

paralysis – poliomyelitis (polio) was then considered as being untreatable. The disease affected 0.1% of the population of Israel. In 1950, out of a total population of 1.2 million, 1,500 were infected by polio. The epidemic struck over three successive seasons and affected more than 3,000 victims. The mortality rate stood at 10%.

Experts, charlatans and fame seekers all presented their inventions to the country – creams, medicines and research projects all designed to bring relief to the sick children. Against all these stood the newly formed Ministry of Health, determined to bring order to the chaos.

The only trial conducted by the Health Ministry was unsuccessful, but it was accompanied by the most stringent controls that would not have shamed even today's researchers. The clinical trials of Zibaline were conducted in the early 60's, after the polio vaccine had been introduced and the epidemic had passed.

The purpose of this paper is to examine the influence of medical ethics, norms and morals on the way that medical practice dealt with the epidemic at a time when there were no laws or rules. ●

MEMORIES OF A JEWISH RURAL DOCTOR IN SOUTH AFRICA DURING THE 1930S AND 1940S

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Providing proper medical care under the laws of racial segregation in South Africa in the 1930s and 1940s involved facing medical and ethical problems. The physician, especially in rural areas, had to take care of a myriad of populations: poor "black" tribal people with little or no education, farmers in remote farms and affluent and better educated "Europeans", without an infrastructure of hospitals and even pharmacies. The lone physician had to make medical decisions on the spot, without being able to consult with other doctors, while maintaining high human, medical and ethical standards. Dr. Jack Karpas, started as a country physician in rustic areas and gained experience in larger hospitals while treating a variety of populations with numerous medical conditions. He later established a prosperous medical practice in Parow (near Cape Town), before immigrating to Israel in 1951. In this excerpt from his memoirs, Dr. Jack Karpas relates some of the exotic incidents and medical problems he encountered. ●

used as a diagnostic test on the one hand and as a follow-up test on the other, where many physicians attribute normal results of this test to the absence of disease. Therefore, the question remains: Is there still room for continued ESR in the 21st century? And are there other tests with higher sensitivity and specificity that can replace the ESR?

The purpose of the current review is to acquaint the reader with this test, its advantages and limitations, and to expand the scope of alternative tests and their effectiveness in comparison to ESR.

It seems to us that the development of technology and research has strongly discouraged the use of ESR, but there are still quite a few instances where this test is still cost-effective. In most cases, especially during the diagnosis of life-threatening diseases, other tests are needed, or there is a need for a combination of the ESR with additional tests. ●

CURRENT CRITERIA FOR THE DIAGNOSIS OF MYELOPROLIFERATIVE NEOPLASMS - WHAT IS IMPORTANT TO KNOW?

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The understanding of the basic molecular mechanisms of myeloproliferative neoplasms in the last few years led to updating of their diagnostic criteria in the recent classification of myeloid and lymphoid neoplasms by the WHO, which was published in 2017. The major changes relating to the diagnosis of myeloproliferative neoplasms include lowering of the hemoglobin threshold and mandatory bone marrow biopsy as major criteria for the diagnosis of polycythemia vera, as well as adding acquired mutation in either CALR or MPL in addition to the common JAK2V617F mutation as a major criterion for diagnosing essential thrombocythemia or myelofibrosis.

We review the newest discoveries on the pathogenesis of myeloproliferative neoplasms, highlighting the relevant new additions to their diagnostic criteria, and relevant therapeutic considerations. ●

PREECLAMPSIA: PATHOGENESIS AND MECHANISMS BASED THERAPEUTIC APPROACHES

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Preeclampsia is a serious complication of pregnancy affecting 3-8% of all pregnancies. It increases the morbidity and mortality of both the fetus and the pregnant woman, especially

in developing countries. It deleteriously affects several vital organs, including the kidney, heart, liver, brain, and lung. Although, the pathogenesis of preeclampsia has not yet been fully understood, growing evidence suggests that aberrations in the angiogenic factors levels/activity and coagulopathy are responsible for the clinical manifestations of the disease. The common nominator of tissue damage of all these target organs is endothelial injury, which impedes their normal function. At the renal level, glomerular endothelial injury leads to the development of maternal hypertension and proteinuria. Similarly, this disease can cause hepatic and neurologic dysfunction due to vascular damage. The current review summarizes the recent development in the pathogenesis of this disease state with special focus on novel diagnostic biomarkers and their relevance to potential therapeutic options for preeclampsia. Specifically, we will highlight the renal manifestations of the diseases with emphasis on the involvement of angiogenic factors in vascular injury and how restoration of the angiogenic balance affects the renal and cardiovascular outcome of preeclamptic women. ●

IS THERE AN INDICATION FOR CLEANING OR DISINFECTING ULTRASOUND TRANSDUCERS BETWEEN CONSECUTIVE EXAMINATIONS FOR FEAR OF TRANFERENCE OF INFECTION TO OR BETWEEN PATIENTS?

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The use of ultrasound is a keystone in current obstetrics and gynecology. In several studies, the presence of various biological infecting agents (bacteria, viruses and fungi) has been demonstrated on various parts of the transducers. These findings led to other studies in which different methods of cleaning, disinfection and sterilization have been evaluated for their efficacy in the elimination of these infections. These studies are inconclusive in terms of the preferred method for the total cleaning of these agents from the transducers. The coupling gel, which is used during sonographic examinations, has also been found to harbor all kinds of polluting biological agents. Despite these findings and due to the lack of scientific evidence for transference of infection to the patients, between patients or the staff, the question for the need of those cleaning procedures has been raised in the current relevant literature. ●

POSITION PAPER: ANTI-TNF α DRUG AND ANTI-DRUG MONITORING IN PEDIATRIC PATIENTS WITH INFLAMMATORY BOWEL DISEASE

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ACUTE RENAL FAILURE INDUCED BY METAMIZOLE

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Sodium metamizole (Opstalgin) is one of the most prevalent analgesic and anti-pyretic medications used in Israel. We describe a case of acute kidney injury subsequent to the use of metamizole in a healthy young patient. Metamizole may cause kidney injury in a number of different mechanisms and it is vital that this fact will be emphasized due to the widespread use of this medication. ●

THE TIME HAS COME! COMPLEMENTARY MEDICINE IN MEDICAL TRAINING IN ISRAEL

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The use of complementary and alternative medicine (CAM) has become increasingly popular in most Western countries. As a result, safety-related issues associated with these practices have become more apparent, including adverse effects and negative interactions with conventional medical therapies. The potential dangers associated with CAM are further exacerbated by the absence of high-quality clinical research on the subject; a lack of a basic understanding of the principles of CAM among physicians; and a reluctance of patients to disclose their use of CAM, including those modalities being used in parallel with conventional medical treatments. The increase in CAM use by their patients and the increased potential for harmful effects and interactions are central to the increasing interest among physicians and other healthcare professionals in learning more about CAM paradigms and practices of care. In light of this increasing interest in CAM, the majority of medical schools in the U.S. and Canada and a large number in Europe are providing their students with compulsory or elective courses on this subject. A similar process is taking place in Israel, with the Faculty of Medicine at the Hebrew University in Jerusalem having completed its first compulsory course in CAM at the Hadassah University Medical Center, Ein Karem.

The increased use of CAM presents a number of challenges to the conventional medical profession. Medical schools can and should provide students with the knowledge and

skills which will enable them to discuss CAM use with their patients, providing evidence-based guidance on the safe and effective use of these modalities. ●

ISOLATED OLIGOHYDRAMNIOS – THE DILEMMA OF PROPER MANAGEMENT

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There are two methods to diagnose oligohydramnios: maximal vertical pocket (MVP) and amniotic fluid index (AFI). Following a recent large Cochrane review and other studies, MVP is being recommended as the method of choice by professional societies, after it was shown to result in fewer inductions of labor and C-sections (CS), without compromising neonatal outcome.

There is controversy regarding the management of isolated oligohydramnios (IO). It is unclear whether this finding reflects an underlying pathological process, and therefore management protocols differ between different institutions. Studies have shown a higher rate of CS (RR of >2) in IO. Whether this is a true complication of IO or is a result of different confounders like labor inductions and primigravidity is unclear. The effects on neonatal outcomes are also unclear; whereas some authors did not show any adverse effects, others have shown higher rates of neonatal intensive care unit (NICU) admissions, lower Apgar scores and higher rate of Meconium aspiration syndrome. Some studies have shown a higher rate of undiagnosed small for gestational age (SGA) in IO pregnancies.

There is no consensus regarding the optimal management and time of delivery. Until now, common practice was to induce labor at term, and some advocate induction in late preterm. Recently, the growing awareness to early term morbidity has led practitioners to question the benefit of early induction. There are several studies that have shown maternal hydration to improve AFI, but there is insufficient data to show the effect on outcomes.

In conclusion, many questions regarding IO are still unanswered, and further research, specifically RCT studies, is needed. ●

IS THERE STILL A PLACE TO USE ERYTHROCYTE SEDIMENTATION RATE IN THE 21ST CENTURY?

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Erythrocyte sedimentation rate (ESR) is a simple test that is not without limitations but is still widely used. Dysfunction is

MALIGNANT OPTIC GLIOMA OF ADULTHOOD

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A 61-year-old man presented with acute painless optic neuropathy with resultant no light perception in his left eye. Neuro-ophthalmological examination, optical coherence tomography and fluorescein angiography did not reveal the etiology. Since the patient had a cardiac pacemaker, he underwent a CT scan with contrast of the brain and orbits, which was normal. Five months later, the patient presented with visual field loss in his right eye. A repeat targeted CT scan was normal but after stopping his pacemaker, an MRI of the brain was obtained and revealed a space-occupying lesion involving the optic chiasm and both optic nerves. Lesion biopsy was consistent with glioblastoma multiforme. Despite treatment with radiotherapy and chemotherapy the patient died four months later. This case report emphasizes the importance of insisting on a high-quality brain MRI in the workup of optic neuropathy. ●

NEW ANALGESIC PROTOCOL FOR THE TREATMENT OF PAIN AND ANXIETY IN PEDIATRIC BURN PATIENTS - DEVELOPMENT, IMPLEMENTATION AND FIRST RESULTS

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Introduction: Burns are one of the most common and painful injuries among babies and children. The pain endured during and in between treatment can be minimized with sedation. These sedations, however, are not without side effects and risks. Given the potential complications, we devised a Burn Analgesic Treatment Protocol that incorporates safe analgesia during burn treatment and throughout the day, thus minimizing the necessity for sedations.

Aim: Assessment of the effectiveness of the analgesic protocol by quantification of overall number of sedations needed for burn treatment and by assessment of the overall experience of the treating medical team exposed to burn care before and after implementation of the protocol.

Methods: A retrospective analysis of analgesic treatment regimens among admitted pediatric burn patients both before and after the implementation of our analgesic protocol was performed. Furthermore, questionnaires were given to the nurses of the treating medical team in order to better assess

overall experience with the new analgesic protocol.

Results: A total of 87 patients were treated with the new analgesic protocol and 46 patients served as the control group. A significantly lower number of sedations were performed in the group treated with the new protocol compared to the control group (18% vs 30%, $p=0.057$). The questionnaires filled out by the treating nurses revealed an average score of 4.5 (between 1-5), indicating high satisfaction with the protocol.

Conclusions: Our new analgesic protocol allows for highly effective treatment of burn wounds while minimizing the necessity for sedations, thus increasing overall patient safety and reducing potential complications. ●

SCARLESS THYROIDECTOMY AND PARATHYROIDECTOMY BY TRANSORAL ENDOSCOPIC TRANSVESTIBULAR APPROACH (TOETVA): THE FIRST SERIES CASES IN ISRAEL

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Introduction: The transcervical approach has been the primary route of access for thyroid and parathyroid glands since its description by Kocher 140 years ago. Several approaches have been suggested for minimizing the surgical scar but none of them have become common practice. Thus, a role for a new novel technique still exists for improving surgical esthetic outcome. Trans-oral endoscopic trans-vestibular approach (TOETVA) has recently been reported as a novel approach for the extraction of thyroid or parathyroid tumors.

Aim: To show the safety and feasibility of TOETVA for thyroid and parathyroid surgery in Israel.

Methods: Case series of patients who underwent TOETVA at our institution. The study was approved by our Institutional Board IRB retrospectively.

Results: Ten patients (5 thyroidectomies and 5 parathyroidectomies) underwent TOETVA and were included in the study. The average time of surgery was 3.3 hours. One patient had transient vocal cord paralysis, a second patient had altered sensation of chin and a third patient had seroma that was resolved by aspiration. Surgery was successful in all patients and complete resection of the thyroid lobe as well as the parathyroid adenomas was achieved. No permanent complications were encountered.

Discussion: We report the first series of patients in Israel undergoing TOETVA for thyroid and parathyroid tumors. The learning curve is steep and improving. Surgery was uneventful and safe. The results are comparable to other reports from various centers which adopted this novel technique.

Conclusions: In this study TOETVA was found to be feasible and safe for the resection of selected thyroid and parathyroid tumors. ●