

トピックス

炎症性腸疾患における新たな治療標的抗原としての炭酸脱水酵素 I

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臨床実習の成績を評価するためのツール

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エディトリアル

Sentinel node navigation surgery の現況と新展開

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第3次坂の上の雲

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原 著

5-Fluorouracil 投与により誘発される皮膚障害に関する研究

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Summary

5-Fluorouracil (5-FU) and/or its metabolites induce adverse epidermal events such as Palmar-Plantar Erythrodysesthesia (PPE) in a population of patients subjected to the anti-cancer chemotherapy. The pathogenesis of PPE has not been fully elucidated, and no appropriate animal model for 5-FU-induced PPE has been established yet. The PPE animal model, if developed, would provide a tool for the prevention or therapy of cutaneous lesions in the future. We have developed a PPE rat model with plantar skin lesions including keratinization or erythema after 4 weeks of continuous 5-FU infusion at doses of 15 and 18 mg/kg/24hrs. Degeneration or cell death of keratinocytes in the basal layer was observed together with inflammation at the upper layers of skin in the model. We further discovered the distribution of 5-FU and its metabolites at the plantar skin in rats after a [2-14C] 5-FU bolus injection. Total radioactive levels possibly containing 5-FU and its metabolites in the skin were comparable to those in the plasma or higher than those in the plasma, and microautoradiography showed the main localization of radioactive silver grains in the epidermal basal layer and dermal papillae of the plantar skin. Subsequent HPLC-RAD analysis demonstrated that the 5-FU distribution in the plantar skin was equivalent to that in the plasma or higher than that in the plasma,

and that 5-FU metabolites also existed in the plantar skin. A 5-FU-induced PPE rat with resemblance, at least in morphological features, to human PPE, may be used as a tool to investigate the pathogenesis of PPE and to develop a method for the treatment of PPE.

Key Words : 5-Fluorouracil, Palmar-Plantar Erythrodysesthesia, skin lesion model

口腔扁平上皮癌における頸部リンパ節転移分子診断マーカーの同定

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Summary

Lymph node metastasis is an important prognostic factor in oral squamous cell carcinoma (OSCC) . During operation, the presence or absence of metastasis in sentinel lymph node must be decided in a limited period of time. Moreover, such diagnoses are made by the use of at most one or two sections from maximal cut surface. Because of these difficulties, detecting micro-metastasis by the use of only frozen sectioned slides is limited. We carried out a clinical trial to evaluate a new automated assay system for cytokeratin 19 (CK19) mRNA, using the one-step nucleic acid amplification (OSNA) method, to detect lymph node metastasis in OSCC. While the accuracy of this trial was nearly 97% , it failed to detect metastasis in minor population of primary tumors lacking CK19mRNA expression. In this study, we introduced new molecular markers, ANXA8L2 and DSG3. Combination of CK19 and these two novel markers would facilitate the precise diagnoses of presence or absence of lymph node metastasis, and thus lead to the appropriate treatment.

Key Words : oral squamous cell carcinoma (OSCC) , sentinel lymph node biopsy, molecular marker

麻沸湯論と鎌田玄台～世界で最初の麻酔科教科書は伊予大洲で著された！

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Summary

Mafututoron was written in Ozu, Ehime, in 1839 by Gendai Kamata, who was one of the best apprentices of Seisyu Hanaoka. In Mafututoron, Gendai wrote many important things regarding the general anesthesia using Mafututo, such as pre-anesthetic care and evaluation, induction of anesthesia, maintenance of anesthesia, post-anesthetic care, handling of children when anesthetizing them, and so on. Even though Seisyu developed the general anesthesia using Mafututo in 1804, he did not leave any textbooks on the methods he invented. Therefore, Mafututoron is the oldest textbook on clinical anesthesia in Japan. Incidentally, the oldest textbook on clinical anesthesia in Western countries is William Morton's, written in 1846, or John Snow's in 1847. Therefore, Mafututoron, written in 1839 in Ozu, is the oldest existing textbook on clinical anesthesia in the world.

Key Words : Mafututoron, Gendai Kamata, History of Anesthesia

総 説

骨盤臓器脱に対する Tension-free vaginal mesh (TVM) 手術

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Summary

Lately, tension-free vaginal mesh (TVM) operation is widely accepted around the world as one of the treatments for pelvic organ prolapse (POP). In Japan, TVM operations have been practiced since 2005. Our department has been performed these operations since February 2007. Based upon our experiences from 100 cases of TVM operations, we herein review POP and TVM operations.

Key Words : POP, TVM operation

ハワイ大学医学部 SimTiki シミュレーションセンターに学ぶ新しい教育技法

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Summary

SimTiki is the simulation based healthcare education center at John A. Burns School of Medicine, University of Hawaii. SimTiki facilitates over 3,000 simulation based training encounters annually. International programs include sponsored in-residence research scholar positions and shorter programs focused on faculty development and clinical skills. I visited SimTiki from September 18 to September 30, 2011. In this article, I have reported the new educational skills I learned at SimTiki :

- In recently years, simulation based medical education (SBME) has become more important.
- In SBME, the traditional notion of the“expert teacher”needs to be replaced by that of a“facilitator”or “coach”.
- “See one, do one, teach one”is an ancient idiom. The paradigm of SBME is“Read textbook, see one, simulation training, do one, teach one”. This paradigm can make the ethical transition from book to bedside smooth.
- In debriefing, which is an essential part of SBME, the instructor should use a structured model like GREAT and G-A-S.
- We can use check lists, the Likert scale, the anchored Likert scale and the Global Rating Scale when evaluating participants.

Key Words : medical education, simulation, SimTiki

症例報告

術前画像検査が有用であった回腸脂肪腫による成人腸重積症の1例

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Summary

A 72-year-old woman was admitted to our hospital due to upper abdominal pain. Abdominal CT and MRI showed findings indicative of intussusceptions of the ileum, and showed an ileal lipoma producing intussusceptions. During the laparotomy, after successful reduction of the intussusceptions with the Hutchinson's maneuver, a partial resection was performed. Histopathological examination revealed proliferating fat cells in the submucosal layer. These characteristics confirmed the diagnosis of an ileal lipoma.

Intussusception in adults is relatively rare and may be difficult to diagnose preoperatively. In the diagnosis of this disease, abdominal CT and MRI are useful.

Key Words : Lipoma, Intussusception, Preoperative imaging studies

糖尿病の治療経過中にみられたチアジド含有降圧剤による光線過敏症の3例

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Summary

The management of blood pressure is extremely important in preventing diabetes complication and death. Angiotensin 2 receptor blockers (ARB) provide organ protection for diabetic subjects. However, ARB monotherapy is inadequate for controlling blood pressure among diabetics. Therefore, diabetics need several anti-hypertensive agents to maintain optimal blood pressure. The Japanese Society of Hypertension recommended administration of tablets with ARB/Low-dose hydrochlorothiazide (HCTZ) to control blood pressure. Diuretics can help to get rid of excess salt and fluids. Low-dose HCTZ is one of the ideal blood -pressure lowering agents for salt-sensitive hypertension resulting from diabetes and other metabolic syndromes. ARB and HCTZ combinations offset diuretic-induced side effects. However, photosensitivity dermatitis due to diuretics remained. The frequency of photosensitivity is suspected to increase due to HCTZ.

Here we report three diabetes cases with photosensitivity due to tablets with ARB/HCTZ along with literature review.

Key Words : hydrochlorothiazide, photosensitivity, antihypertensive diuretic

骨粗鬆症を契機に診断されたバセドウ病の1例

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Summary

This case was a 65-year-old female who had been suffering from osteoporosis for a year. Urinary deoxypyridinorine (U-DPD), which is one of the most sensitive bone metabolic markers, was at a high level, and therefore the patient was diagnosed with Basedow's disease with secondary osteoporosis. After treatment of Basedow's disease with thiamazole, U-DPD was normalized, but bone mineral density was increased for several years.

Key Words : Basedow's disease, osteoporosis, urinary deoxypyridinorine

¹³¹I 内用療法で治療した甲状腺機能性結節の1症例

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Summary

This case was a 69-year-old female who had an autonomously functioning thyroid nodule (AFTN), which was diagnosed with an ultrasonic device. After she was treated with radioiodine (¹³¹I), her thyroid function returned to a normal range for 2 years. There are four treatment methods for AFTN: antithyroid drugs, ethanol injection therapy, surgery and radioiodine therapy. Each way has both merits and demerits. The adequate method

of therapy must be selected for each patient.

Key Words : AFTN, radioiodine, thyroglobulin

研究会抄録

第 47 回 愛媛臨床血液懇話会

愛媛医学 31(2):102-103, 2012

第 13 回 愛媛肛門疾患懇話会

愛媛医学 31(2):104-105, 2012

第 45 回 愛媛県血管外科研究会

愛媛医学 31(2):106, 2012

第 127 回 愛媛整形外科集談会

愛媛医学 31(2):107-110, 2012