

トピックス

蛍光ビーズマイクロアレイシステム(Luminex法)を用いたABO血液型遺伝子の自動解析

西向 弘明¹⁾, 伊藤 早織²⁾, 沖浦 達幸¹⁾, 福森 泰雄³⁾

1) 愛媛大学大学院法医学分野 2) (株)医学生物学研究所 3) 大阪府赤十字血液センター
愛媛医学 30(2):81-85, 2011

動脈硬化の進展とレニン-アングiotenシン系

青野 潤, 鈴木 純, 大木元 明, 檜垣 實男

愛媛大学大学院病態情報内科学分野

愛媛医学 30(2):86-90, 2011

原著

大腸癌に対する腹腔鏡下大腸手術の長期成績

山下 広高^{1),2)}, 八木 草彦¹⁾, 高月 秀典¹⁾, 古賀 繁宏^{1),3)}, 明比 俊^{1),3)}, 原田 雅光^{1),2)}

1) 愛媛県立今治病院外科 2) 愛媛県立中央病院消化器外科 3) 愛媛県立新居浜病院外科

愛媛医学 30(2):91-96, 2011

Summary

Introduction : Some studies comparing laparoscopic versus open surgery for colorectal cancer have demonstrated that there are short-term advantages for the laparoscopic approach, however the long-term surgical outcomes are similar. Because the long-term surgical outcomes are dependent on the skill of the surgeon, the outcomes are thought to be different between institutes. So in our hospital, we investigated the long-term surgical outcomes after laparoscopic resection for colorectal cancer.

Patients : We reviewed 192 colorectal cancer patients without ileus or peritonitis who underwent colorectal resection by either laparoscopic or open surgery from April 2003 to September 2008 at our hospital.

Results : Commenting the short-term outcomes, blood loss volume and flatus show that there is an advantage to the laparoscopic approach compared to the open approach. The long-term surgical outcomes indicate that all are alive and none have relapsed among the Stage 0 and 1 patients. The overall survival periods and disease free periods are slightly longer among the laparoscopic group than among the open group, yet they are not statistically different among the Stage 2, 3a, 3b and 4 patients.

Conclusion : Laparoscopic colectomy for colorectal cancer is not inferior to open surgery based on the long-term outcomes.

Key Words : laparoscopic assisted colectomy, long-term surgical outcomes, colorectal cancer

顔面のデジタル画像処理技術を応用した顔面神経麻痺の客観的評価法の開発

澤井 尚

愛媛大学大学院頭頸部・感覚器外科学分野

愛媛医学 30(2):97-103, 2011

Summary

A new facial-motion scoring method was developed for objective assessment of facial palsy utilizing a face

-image analyzing technology, OKAO Vision® (Omron, Japan) . Two types of face motions, closing eyes and grinning, were recorded from the front with a conventional video camera. The data were moved to a computer and processed with OKAO Vision® software. We attempted to evaluate 28 patients with hemifacial palsy by comparing eye and mouth motions bilaterally. The results were expressed in Facial-motion Symmetry Index (FSI) , which was closely correlated to the scores of Yanagihara's method and inversely to those of House-Brackmann grading system. The advantage of the present method was that the measurement was objective without needing long analysis time. As most of the processes can be undergone automatically, the method might be applicable in daily clinics.

Key Words : facial palsy, grading system, objective method, digital image processing

Rho キナーゼ阻害薬は、ヒト培養骨芽細胞の移動を刺激する

張 雪嬌

愛媛大学大学院解剖学・発生学分野

愛媛医学 30(2): 104-110, 2011

Summary

Roles of Rho-associated kinase (ROCK) in migration and cytoskeletal organization of osteoblasts were studied using primary culture of human osteoblasts and Saos-2 human osteosarcoma cell line. Both cell types were exposed to two different ROCK inhibitors : Y-27632 and HA-1077. In the improved motility assay optimized for the primary culture, Y-27632 and HA-1077 significantly increased the migration of both cells on plastic in a dose-dependent and reversible manner. Fluorescent images showed that cells of both types cultured with Y-27632 or HA-1077 exhibited a stellate appearance with poor assembly of stress fibers and focal contacts. These effects were shown to be statistically significant by morphometric approaches. Inhibition of ROCK activity is thought to enhance the migration of human osteoblasts through reorganization of the actin cytoskeleton with enhanced turnover of actin-related structures. ROCK inhibitors may potentially be useful as anabolic agents to enhance the biocompatibility of artificial bone implants.

Key Words : human osteoblast, migration, ROCK

フェニレフリンによって引き起こされるラット前立腺過形成の成因に関する一考察

柳原 豊

愛媛大学大学院泌尿器制御学分野

愛媛医学 30(2): 111-118, 2011

Summary

Benign prostatic hyperplasia (BPH) is an age-related disease of unknown etiology. It is characterized by prostatic enlargement and coincides with distinctive alterations in tissue histology. To identify the molecular mechanisms underlying the development of BPH, we conducted a DNA microarray study using a previously described animal model in which a chronic α 1-adrenergic was stimulated by repeated administration of phenylephrine, evoking histological changes in the rat prostate that resemble human BPH. By DNA microarray analysis, clusterin was identified as one of the candidate key molecules of the rat model. Clusterin mRNA and protein expression was confirmed independently of the microarray data. In addition, proteins of TGF- β and the receptors were up-regulated in the ventral prostate of rats treated with phenylephrine. Expression of such molecules may be related to the development of tissues resembling human BPH.

Key Words : phenylephrine, clusterin, TGF- β

FRAX[®]を用いた骨折危険率と骨粗鬆症治療の関連性の検討

間崎 桂子¹⁾, 渡部 昌平²⁾, 間島 直彦²⁾, 三浦 裕正²⁾

1)市立大洲病院整形外科 2)愛媛大学大学院運動器学分野

愛媛医学 30(2):119-122, 2011

Summary

We investigated the relationship between the fracture risk rate and the treatment of osteoporosis using the FRAX[®] tool. Two hundred and thirty-two patients, 110 osteoporosis patients and 122 non-osteoporosis patients were examined. The 10-year probability of osteoporotic fractures were evaluated using the FRAX[®] tool. The probability of hip fractures with the osteoporosis and non-osteoporosis groups were 14.2% and 5.4%, respectively. The probability of major osteoporotic fractures with the two groups was 27.0% and 13.1%, respectively. The values of 15% and 7% were calculated as the points to recommend therapy for osteoporosis as the major osteoporotic fracture and the hip fracture, respectively. Although there was a limitation of usage the FRAX[®] tool for the assessment of osteoporosis therapy, it may be useful for not only the probability of osteoporotic fractures, but also developing an index for osteoporosis therapy.

Key Words : osteoporosis, osteoporotic fracture, FRAX_

臨床経験録

食道静脈瘤に対する内視鏡治療後の食道狭窄の検討

宮本 安尚, 二宮 朋之, 平岡 淳, 長谷部 昌, 道堯 浩二郎

愛媛県立中央病院消化器病センター

愛媛医学 30(2):123-128, 2011

Summary

Background / Aim : Tough, endoscopic induction of mucosal fibrosis by argon plasma coagulation (APC), followed by endoscopic variceal ligation (EVL) or sclerotherapy (EIS), effectively prevents recurrence of esophageal varices (EV); esophageal stricture is a common complication after APC.

Methods and Materials : One hundred seventy patients, who were treated with APC after EVL or EIS from October 2005 to September 2009 at our hospital, were enrolled, and risk factors for esophageal stricture and characteristics of patients with esophageal stricture were evaluated retrospectively.

Results : Esophageal stricture was observed in 19 patients (11.2% : stricture group). The levels of serum albumin before treatment of EV was significantly higher in the stricture group than in the non-stricture group (3.73 vs. 3.31 g/dl, $p=0.0019$). In the non-stricture group, the recurrence rates of EV were 11.7% and 30.4% at 1 and 3 years after treatment, respectively. On the other hand, there was no recurrence of EV in the observation period (656 \pm 461 days) in the stricture group. Esophageal stricture was improved by endoscopic balloon dilatation safely and completely in all patients.

Conclusion : Esophageal stricture is a common complication after APC, especially in patients with good liver function for albumin production. Occurrence of esophageal stricture was considered for the predictive factor for well controlled EV.

Key Words : esophageal varices, esophageal stricture, serum albumin

介護老人保健施設で多発したRSVによると考えられる呼吸器感染症

河野 秀久¹⁾，篠原 洋伸²⁾

1)介護老人保健施設たんぽぽ 2)篠原医院

愛媛医学 30(2): 129-133, 2011

Summary

We observed 20 cases of acute respiratory infection in a geriatric health service facility from January 25th to February 21th 2010. Respiratory syncytial virus (RSV) antigen was detected in three of four cases within four days of illness. However, only one of six cases was positive tested after more than five days of illness. We considered that RSV antigen was hardly detectable in the patients passed over five days, according to the literature reporting that RSV shedding declines rapidly in elderly patients. We then concluded that the outbreak was due to RSV infection.

Four patients who had been suffering from chronic bronchitis, bronchiectasia or disturbed food intake, became hypoxemic. Even in the persons without any respiratory or cardiac complications, three patients developed severe wheezing and required bronchodilator medication.

Continuous RSV exposure was suggested by the separate floors' outbreaks and their subsidence following the decrease in RSV case reports from surrounding pediatricians. Although many texts report asymptomatic RSV carriers to be very rare, more than 40% of asymptomatic subjects were identified in an experimental RSV infection in adults. Therefore, we think it is necessary, in endemic areas, to consider the asymptomatic or very slightly symptomatic carriers for preventing RSV outbreak.

Key Words : respiratory syncytial virus, geriatric health service, asymptomatic carrier

症例報告

レーザーシストスコープを用いて治療しえた大量膀胱結石の1例

渡辺 隆太，東 浩司，西田 智保，島本 憲司，丹司 望，横山 雅好

愛媛大学大学院泌尿器制御学分野

愛媛医学 30(2): 134-136, 2011

Summary

A 70-year-old man with a complaint of micturition pain was referred to a clinic. The patient was diagnosed as large quantities of bladder stones by means of KUB. The patient was admitted to our hospital for a transurethral operation. KUB and CT showed that the bladder was filled with multiple small stones. Transurethral lithotripsy using a laser cystoscope was successfully performed. Cholinergic agent and α 1-blocker were administered and periodical clean intermittent catheterization was introduced after removal of balloon urethral catheter. The post-operative course was uneventful.

Key Words : large quantities of bladder stone, transurethral lithotripsy, laser cystoscope

腹部嚢胞性腫瘍として発見された術前診断が困難であった GIST の1例

渡辺 隆太，東 浩司，西田 智保，島本 憲司，丹司 望，横山 雅好

愛媛大学大学院泌尿器制御学分野

愛媛医学 30(2): 134-136, 2011

Summary

A67-year-old Japanese man was admitted to our hospital with complaints of abdominal fullness in August 2009.

Abdominal ultrasonography (US) , enhanced computed tomography (CT) , and magnetic resonance imaging (MRI) revealed a huge cystic tumor occupying the entire abdominal cavity. No diagnosis could be made from imaging examinations. Because the tumor was suspected to be potentially malignant, we performed surgical resection. The tumor was diagnosed as gastrointestinal stromal tumor (GIST) by pathological examination. After resection, Imatinib began to be administered. The patient has been recurrence free for 1 year after the resection.

Key Words : Gastrointestital stromal tumor, cystic tumor, c-kit

研究会抄録

第 44 回愛媛血管外科研究会

愛媛医学 30(3):179, 2011

第 2 回愛媛脊椎髄病セミナー

愛媛医学 30(3):180-183, 2011

第 124 回愛媛整形外科集談会

愛媛医学 30(3):184-188, 2011

第 12 回愛媛 NST(栄養サポートチーム)研究会

愛媛医学 30(3):189-192, 2011