

トピックス

免疫細胞におけるストア作動性カルシウムチャネルの機能解析

劉 爽, 前山 一隆

愛媛大学大学院医学系研究科薬理学分野

愛媛医学 30(1):1-5, 2011

T細胞レセプター遺伝子を用いたがん免疫遺伝子治療のトランスレーショナルリサーチ

越智 俊元, 藤原 弘, 安川 正貴

愛媛大学大学院生体統御内科学分野

愛媛医学 30(1):6-12, 2011

原著

当院人間ドックにおける前立腺癌検診の検討

花山 亜紀, 重松 慶紀, 北野 弘之, 矢野 明, 田丁 貴俊, 藤井 元廣

松山赤十字病院泌尿器科

愛媛医学 30(1):13-15, 2011

Summary

We performed multiphasic health screenings for prostate cancer in our hospital from January 2004 to December 2007. Patients underwent one-day or two-day docks. In the one-day docks, we measured only PSA. In the two-day docks, we measured PSA and performed rectal examinations. For cases in which serum PSA level was more than 4.0 ng/ml or rectal examination was positive, we recommended prostatic needle biopsy and observed the clinical course. 7,656 patients received consultation : 380 were under 40-years-old ; 1,658 between 40-and 49-years -old ; 2,907 between 50-and 59-years-old ; 1,711 between 60-and 69-years-old ; 900 between 70- and 79-years-old ; 100 older than 80 years. Of these 7,656 patients, 298 required additional examination (3.9%) . 119 of these 298 patients (39.9%) consulted our department for additional examination. As a result of prostate biopsy, 30 people were diagnosed with prostate cancer. So the rate of detection among the total number of patients was 0.39% (30/7,656) . The patients diagnosed with prostate cancer ranged for 51-to 81-years old (a mean of 67.8-years-old) . PSA level was distributed between 3.0 ng/ml and 27.62 ng/ml. A level of 3.0 mg/ml was present in only one case ; 4.0-10.0 ng/m (I the so-called“gray zone”) was present in 22 cases ; and a level over 10.0 ng/ml was present in 7 cases. The case with PSA 3.0 ng/ml had a positive rectal examination.

Key Words : prostate cancer, health screenings, health screenings for prostate cancer

突発性難聴の臨床的検討-予後因子について-

岡田 昌浩^{1),2)}, 中村 光士郎^{2),3)}, 暁 清文¹⁾

1)愛媛大学大学院頭頸部・感覚器外科学分野 2)愛媛県立中央病院耳鼻咽喉・頭頸部外科

3)愛媛県立南宇和病院耳鼻咽喉科

愛媛医学 30(1):16-21, 2011

Summary

The purpose of this study is to investigate factors affecting the hearing prognosis in patients with idiopathic

sudden sensorineural hearing loss (ISHL) . In 115 patients hospitalized in Ehime Prefectural Central Hospital, we analyzed hearing level, the pattern of the audiogram, and hearing improvement three days and seven days after the beginning of the treatment. All patients were treated with the same protocol using intravenous administration of prednisolone, dextran, ATP, Vitamin B12 and prostagrandin E1. While patients with middle tone hearing loss type showed better prognosis, patients with severe hearing loss had a worse prognosis. When audiometric threshold of 4kHz improved more than 15dB within 3 days after beginning of the treatment, his or her hearing was considered significantly improved.

Key Words : sudden deafness, pattern of audiogram, prognostic factor

β-エンドルフィンによるメラニン生成抑制作用

奥村 秀信^{1),2)}

1)株式会社ノエビア研究開発本部 2)愛媛大学大学院感覚皮膚医学分野

愛媛医学 30(1):22-29, 2011

Summary

β-endorphin has an inhibitory effect of melanogenesis on pigment cells. In order to elucidate the inhibitory mechanism of melanogenesis, the expression and enzymatic activity of tyrosinase was examined. However, β-endorphin had no effect on the expression and enzymatic activity of tyrosinase. Next, we studied the transportation of tyrosinase to the melanosome, an organelle to synthesize melanin. β-endorphin suppressed the expression of Rab38 protein, a component of the conjugated proteins necessary for transporting tyrosinase to the melanosome. Inhibition of Rab38 by siRNA suppressed the melanin synthesis in pigment cells. Taken together, these results indicate that β-endorphin inhibits the melanogenesis through the suppression of Rab38 expression. The present study indicates that it would be possible to develop an active whitening agent suppressing Rab38.

Key Words : β-endorphin, Rab38, melanogenesis

Effects of telmisartan on metabolic parameters in patients with essential hypertension

Zuowei Pei¹⁾ , Takafumi Okura¹⁾ , Ken-ichi Miyoshi¹⁾ , Toshio Honda²⁾ , Junji Doiuchi³⁾ , Masayuki Takezaki⁴⁾ , Hirokazu Takahashi⁵⁾ , Shousei Nagaoka⁶⁾ and Jitsuo Higaki¹⁾

1)Department of Integrated Medicine and Informatics, Ehime University Graduate School of Medicine

2)Sadamoto Hospital 3)Kazahaya Clinic 4)Health Care Room in Daio Paper Corporation

5)Watanabe Hospital 6)Kume-Kubota Clinica

愛媛医学 30(1):30-34, 2011

要旨

高感度CRPの上昇は本態性高血圧患者において心血管病の発症と関連する。高分子量アディポネクチンは動脈硬化形成に関与し、その低下は冠動脈疾患の発症と関連することが報告されている。アンジオテンシン受容体拮抗薬であるテルミサルタンは、ペルオキシソーム増殖因子活性化受容体(PPAR-γ)を活性化することが知られている。PPAR-γの活性化は高感度CRPを低下させ、高分子量アディポネクチンを増加させる。本研究では、これまで降圧薬による治療を受けていない25人の本態性高血圧患者を対象として、テルミサルタン投与後の高感度CRPと高分子量アディポネクチンの変化を検討した。テルミサルタン投与24週間後、収縮期および拡張期血圧は有意に低下した。さらに高感度CRPは有意に低下し、高分子量アディポネクチンは有意に上昇した。テルミサルタンは高血圧患者に対して血圧を低下させるのみでなく、CRPを低下させ、アディポネクチンを増加させることで動脈硬化を抑制する可能性が示唆された。

収縮力保持型心不全と収縮力低下型心不全の臨床的相違点の検討

川上 秀生, 大下 晃, 河野 珠美, 藤田 鉄平, 松岡 宏

愛媛県立今治病院循環器科

愛媛医学 30(1):35-39, 2011

Summary

Background : Heart failure (HF) with preserved ejection fraction (EF) is common. We compared the characteristics, treatments, in-hospital prognosis, and re-admission rate in HF patients with reduced vs preserved EF by using the database in our hospital.

Methods and Results : The study was involved 106 patients selected from our patients' database who were admitted for worsening chronic heart failure. Patients with preserved EF (EF \geq 50% by echocardiography ; n=35) were more likely to be older, female, have hypertension and atrial fibrillation, and less likely to have ischemic etiology, diabetes mellitus, and chronic renal failure compared with those with reduced EF (EF $<$ 40% ; n=50) . In-hospital mortality (4% vs 11.4% ; n. s.) and rehospitalization rates (18% vs 17% ; n. s.) were almost the same in both groups. Administration of renin-angiotensin system inhibitors, digitalis and spironolactone were almost the same rates in both groups, but administration of β -blocker was lower rate in patients with preserved EF than in patients with reduced EF.

Conclusions : Baseline patients' characteristics and medications in each group were different. These data seem useful in managing each group, and effective management strategies are sorely lacking for HF with preserved EF.

Key Words : Ejection fraction, Heart failure, Patients' characteristics, Medications

ヒト子宮内膜および末梢血中における side population cell と子宮内膜増殖との関連性

兵頭 慎治

松山赤十字病院産婦人科

愛媛医学 30(1):40-48, 2011

Summary

Objectives : The objective of this research is to examine the change of side population cells (SP cells) in human uterine endometrium and peripheral blood, and to investigate the change of SP cells in infertile patients.

Material and Methods : Uterine endometrial tissue and peripheral blood was collected from patients undergoing gynecologic surgery and infertile outpatients. A transvaginal ultrasound device measured uterine endometrial thickness and a fluorescence-activated cell sorter measured the percentage of SP cells in uterine endometrium and peripheral blood. Then plasma concentration of estradiol and progesterone in the peripheral blood was measured using a chemo luminescent immuno assay.

Results : Infertile outpatients demonstrated low percentages of SP cells in the epithelium and peripheral blood during the menstrual phase. A positive correlation was shown between endometrial thickness and the percentage of SP cells in the endometrial epithelium (n=41, $r_2=0.10$, $p<0.05$) . A positive correlation was also shown between the percentage of SP cells and plasma concentration of progesterone in the uterine endometrial epithelium and the peripheral blood.

Conclusions : It is possible that SP cells are involved in uterine endometrial regeneration. Low percentages of SP cells in menstruation could be a biomarker for infertility.

Key Words : infertility, side population cell, uterine endometrium

症例報告

SIADH との鑑別に苦慮した高齢者鉍質コルチコイド反応性低ナトリウム血症 (MRHE) と考えられた1例

岡本 典子, 寺岡 裕貴, 宮内 省蔵, 江口 透, 堀川 慶一, 池田 祐一, 金子 政彦

市立宇和島病院内科

愛媛医学 30(1):49-54, 2011

Summary

A 81-year-old man who complained he had developed fatigue and lethargy was admitted to our hospital. He was diagnosed with hyponatremia and was hospitalized. Endocrinological examinations and clinical course revealed mineralocorticoid responsive hyponatremia of the elderly. After he was medicated with 0.1 mg/day of fludrocortisone, serum levels of sodium normalized. His general condition and activity of daily living improved. This case is significant because of the fact that mineralocorticoid responsive hyponatremia of the elderly is difficult to distinguish from SIADH in elderly patients.

Key Words : MRHE, hyponatremia, fludrocortisone

バンコマイシン血中濃度から Munchausen 症候群が疑われた1例

森 蓉子¹⁾, 永井 将弘²⁾, 田邊 奈千²⁾, 矢部 勇人²⁾, 西川 典子²⁾, 野元 正弘²⁾

1) 愛媛大学大学院脳とこころの医学分野 2) 愛媛大学大学院病態治療内科学分野

愛媛医学 30(1):55-58, 2011

Summary

A 31-years-old woman repeatedly suffered from a septic fever for two months. Although she was treated with several kinds of antibiotics, effectiveness of the drugs was transient. We noticed that her blood concentration of vancomycin was inexplicable low. We suspected she may be discarding her antibiotics. Furthermore, based on the unusual pattern of fever and pulmonary microembolism detected by chest CTscan, we also suspected that she had contaminated her intravenous catheter or injected foreign substances intentionally. After the intravenous catheter was removed, the fever declined. For these reasons, we have diagnosed Munchausen syndrome.

Munchausen syndrome is a psychiatric disorder characterized by the following features : 1) feigned illness or self-induced illness, 2) pathological lying, 3) wandering from hospital to ('hospital hopper'). In this case, the blood concentration of vancomycin provided a clue to the diagnosis of Munchausen syndrome. It is necessary to take Munchausen syndrome into consideration when symptoms and laboratory results are inexplicable.

Key Words : Munchausen syndrome, unknown fever, blood concentration of antibiotics

Cap polyposis 様所見を呈した隆起型 MPS の1切除例

串畑 史樹^{1),2)}, 松本 欣也¹⁾, 渡辺 学¹⁾, 横田 智行³⁾, 渡辺 英生¹⁾

1) 渡辺病院外科 2) 愛媛大学大学院肝胆膵・移植外科学分野 3) 松山赤十字病院内科

愛媛医学 30(1):59-62, 2011

Summary

A 40-year-old woman was admitted to our hospital due to bloody mucous in stool and occasional rectal prolapse. A colonoscopy showed multiple polypoid lesions covered with whitish exudate in the rectum, largely compatible with cap polyposis. After being treated with metronidazole for three months, her symptoms and colonoscopic findings remained, and so she underwent transanal excision of the polyps and subsequent endoscopic mucosal

resection (EMR) . Pathological diagnosis of resected specimen was MPS, and a follow-up colonoscopy revealed no recurrence.

Key Words : Mucosal prolapse syndrome, Cap polyposis, Transanal excision

研究会抄録

愛媛脳神経外科懇話会第 101 回学術集会

愛媛医学 30(1):63-66, 2011

第 45 回愛媛臨床血液懇話会

愛媛医学 30(1):67-68, 2011

第 122 回愛媛整形外科集談会

愛媛医学 30(1):69-73, 2011

愛媛病理研究会記録

愛媛医学 30(1):74-76, 2011

第 10 回愛媛県摂食嚥下研究会

愛媛医学 30(1):77-78, 2011