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京都大学医学部外科整形外科学教室内

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## 目 次

### 話 題

完全静脈栄養と軟質バッグによる人工腸管 ..... 谷 村 弘 (1)

### 原 著

食道癌術後局所制癌剤療法に関する基礎的研究,

とくに胸管内 Bleomycin 持続注入法について ..... 村 上 通 治 (3)

Telescoping 吻合による人工腸弁および non-trnsected

筋層弁の実験的、臨床的研究 ..... 里 村 紀 作、他 (21)

抗癌剤の小腸粘膜におよぼす影響についての臨床的実験的研究 ..... 関 本 嚴 (33)

### 臨 床

胸部大動脈瘤の外科治療について ..... 鯉 江 久 昭、他 (60)

関心術中の心筋保護の臨床的検討 ..... 小 西 裕、他 (73)

絹糸に起因する胆石形成について ..... 青 木 洋 三、他 (85)

地方病院における小児外科症例 ..... 原 慶 文、他 (92)

### 症 例

上部消化管瘻に対する高カロリー輸液、FOY併用投与による1治験例 ..... 勝 田 仁 康、他 (98)

肺水腫を伴った完全型心内膜床欠損症の1手術治験例 ..... 奥 秀 喬、他 (104)

第8回近畿脳腫瘍研究会 ..... (111)

## 目 次

### 話 題

変形性脊椎症と腰部脊柱管狭窄症 ..... 渡辺 良 (119)

### 原 著

急性吸呼不全における体外補助循環時の酸素分配について (V-A バイパスと

V-V バイパスの比較) ..... 松田 光彦 (121)

食道癌術後肺合併症の検討：とくに迷走神経と肺合併症との関連

第 2 編 実験的検討 ..... 村上 順夫 (135)

マイクロ波組織凝固装置による新しい肝切除術 ..... 田伏 克惇 (160)

新しい人工腸弁とその検討 ——the intussuscepted conical valve と

the mucosal valve との比較—— ..... 大西 慧 (173)

脳血管攣縮に対する髄腔内線溶療法の実験的研究 ..... 吉田 康成, 他 (188)

重症クモ膜下出血の治療

——クモ膜下腔赤血球の重要性とその除去法について—— ..... 芹坂 邦彦, 他 (197)

急性呼吸不全に対する補助循環の実験的研究 ——とくに灌流中および

直後の血行動態について ..... 友沢 尚文 (205)

肺全切除後の血中グルカゴン分泌動態に関する研究 ..... 須藤 峻章 (217)

### 臨 床

小児の腹部超音波検査診断 ——特に小児卵巣腫瘍を中心に—— ..... 竹内 節夫, 他 (233)

第10回 中国四国脳神経外科談話会 ..... (243)

## 目 次

### 話 题

- 頭蓋咽頭腫の治療 ..... 森 惟 明 (259)

### 原 著

- Short bowel syndrome に対する intestinal valve の効果 ..... 木 阪 義 彦 (261)

- 前尖腱索断裂による僧帽弁閉鎖不全症に対する弁形成術 ..... 三 木 成 仁, 他 (289)

- Ⅲ型心室中隔欠損症 (Kirklin 分類) の外科的治療 ..... 横 田 通 夫, 他 (297)

#### 先天性僧帽弁閉鎖不全症に対する僧帽弁輪縫縮術の効果

- とくに、心エコー図による術後追跡調査について ..... 南 一 明 (311)

#### ヒト臍帯静脈移植に関する実験的研究

- 処理法、仮性内膜、抗原性について ..... 新 谷 清 (333)

- 僧帽弁弁輪縫縮の実験的研究 ..... 鯉 江 久 昭 (348)

#### 四肢静脈血栓症における血栓溶解療法の検討

- Urokinase 投与に伴う FDP と Plasmin Inhibitor の変動を中心について ..... 竹 内 節 夫, 他 (354)

- 脊椎管狭窄症の Myelography 水溶性造影剤と油性造影剤の比較 ..... 近 藤 明 恵, 他 (362)

### 臨 床

#### 無脾症を伴なった単心房の手術

- 特に異常刺激伝導路の処置について ..... 龍 田 憲 和, 他 (372)

- Wolf-Parkinson-White 症候群の外科治療 —— 3 症例の経験 —— ..... 龍 田 憲 和, 他 (382)

- 脳神経外科に於ける術後過高熱 ..... 寺 浦 哲 昭, 他 (393)

#### 脳血管障害例に対する 1,4-Dihydropyridine

- 誘導体 YC-93 の臨床使用経験 ..... 半 田 譲 二, 他 (400)

### 症 例

- 乳腺サルコイドと考えられた 1 例 ..... 篠 田 正 昭, 他 (404)

- 感染及び風疹抗体価上昇を伴った頭蓋内 Fibromuscular dysplasia ..... 寺 浦 哲 昭, 他 (411)

- 脳外科同門会 ..... (419)

- 岐阜外科集談会 ..... (428)

## 目 次

### 話 題

腹部大動脈閉塞について ..... 渡辺 裕 (437)

### 原 著

- 静脈注射用脂肪乳剤の走査電子顕微鏡的観察 ..... 谷村 弘, 他 (439)  
高位腹部大動脈閉塞症の臨床的研究 ..... 岡本 好史, 他 (450)  
実験的脳腫瘍組織の生化学的分析 ..... 松元 幹郎 (459)  
グリオーマの生化学的研究  
—— DBc-AMP の腫瘍細胞に対する役割を中心として —— ..... 長澤 貞継 (471)  
頭蓋内圧亢進と Tentorial Shear Strain ..... 後藤 弘 (484)  
放射線照射の細胞性免疫に及ぼす影響の研究 (I)  
乳癌術後照射症例における検討 ..... 木下 誠一 (498)

### 臨 床

- 腸内細菌叢と胆汁酸代謝——静脈栄養と経口摂取の差異に関連して ..... 久山 健 (511)  
消化性潰瘍と糖代謝. 1. 糖経口負荷及びアルギニン静注によるインスリン,  
ガストリン及びグルカゴン反応 ..... 中安 顯 (517)  
内瘻形成せる大腸癌の予後 ..... 勝見 正治, 他 (528)

### 症 例

- 動脈瘤と動静脈奇形を合併した Carotid-SCA anastomosis の 1 例  
—A variant of persistent trigeminal artery— ..... 松田 功, 他 (535)  
脾臓瘍を合併した肺体部癌の 1 例 ..... 楊忠和, 他 (542)  
第9回 近畿脳腫瘍研究会 ..... (547)  
第92回 岐阜外科集談会 ..... (557)  
第93回 岐阜外科集談会 ..... (560)  
第94回 岐阜外科集談会 ..... (564)

## 目 次

### 話 題

骨巨細胞腫に関する最近の研究 ..... 藤 原 祐 三 (569)

### 原 著

肺表面活性物質に対する必須脂肪酸欠乏の影響についての実験的研究 ..... 田 畑 良 宏 (571)

ドバタミンおよびドーパミンが実験的洞房結節障害犬の血行動態に  
およぼす影響 ..... 龍 田 憲 和, 他 (587)

ファロー四徴症における開心術時心機能評価, 特に予後との関係について ..... 楠 原 健 善 (602)

無菌動物を用いた2, 3の急性腹症に関する実験外科学 ..... 久 山 健 (618)

### 臨 床

胃平滑筋腫 ——自験5例を含む本邦例の展望—— ..... 勝 田 仁 康, 他 (627)

トルコ鞍部腫瘍にみられたモヤモヤ血管の1例 ..... 石 川 正 恒, 他 (639)

### 症 例

若年性ポリープの2例 ..... 田 畑 良 宏, 他 (645)

網囊ヘルニア  
—大網より左側横行結腸が侵入しイレウス症状を呈した1例—— ..... 笠 原 洋, 他 (651)

## 目 次

### 話 題

心筋保護法 ..... 龍田憲和 (655)

### 原 著

関節軟骨における Lysozyme の研究 ..... 松本禎仁 (657)

実験的脳動脈瘤の誘発 ..... 橋本信夫 (667)

ラット酢酸胃潰瘍の治癒と Lysosome ..... 柳平一 (679)

静脈注入中性脂肪の代謝における腸内細菌叢の役割 ..... 久山健 (692)

#### 回腸バイパス術後の胆石発生に関する実験的研究

第1編：イヌの胆汁脂質におよぼす回腸バイパス術の影響 ..... 小林展章 (698)

#### 低ヘマトクリット条件下の脳に対する Fluorcarbon (Fluosol-DA) の効果

第1報：高度脱血交換犬を用いた研究 ..... 長沢史朗, 他 (712)

### 臨 床

国産脂肪乳剤 Intra lipos<sup>TM</sup> の臨床応用 ..... 谷村弘, 他 (720)

第10回 近畿脳腫瘍研究会 ..... (728)

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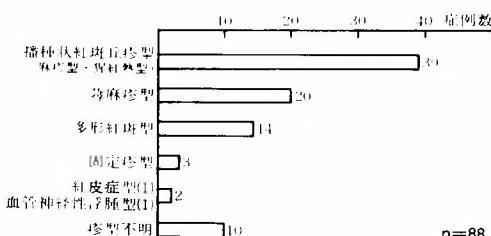
### 皮疹の種類と発生日

#### ■ケフレックスの副作用の種類と発生例数<sup>1)</sup>

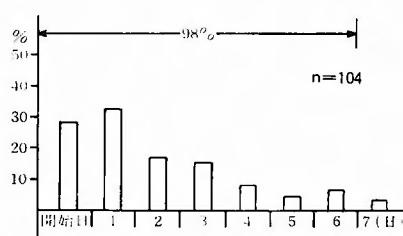
全国の医師よりシオノギに提供された副作用症例(1,411例)を集計した結果、下痢、軟便などの胃腸障害が大半(85%)を占めたが、過敏症(12.3%)では、皮疹、瘙痒感等の皮膚症状(143例・10.1%)が最も多く報告された。

#### ■ケフレックスによる皮疹

##### ■皮疹の種類<sup>2)</sup>



##### ■皮疹の発生日<sup>1)</sup>



- 種々の疹型の皮疹が発生する可能性があるが、麻疹型・猩紅熱型が多く、ついで莓麻疹型が多かった。
- 皮疹の殆どが投与開始後1週間以内に発生していた。
- 薬剤投与中止により殆どの症例は1週以内に軽快していた。

文献 (1)伊藤昌男・城祐孝:最新医学31(7):1385(7.1976) (2)シオノギ製薬 調査資料

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  - 2) 三宅 儀：副腎皮質ホルモンの測定と臨床。最新医学 6 : 769-782, 昭26.
  - 3) Sissons HA : The growth of bone. In The Biochemistry and Physiology of Bone edited by Bourne. GH, New York, Academic Press Inc 1956, p. 72.
  - 4) 所 安夫：脳腫瘍。東京, 医学書院, 昭34.
  - 5) Wolf S and Wolf HG : Human Gastric Function, London, Oxford University Press, 1943.
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## **Studies on the Postoperative Local Adjuvant Chemotherapy for Esophageal Carcinoma, Especially the Infusion of Bleomycin into the Thoracic Duct**

MICHIHARU MURAKAMI

The 2nd Surgical Division, Yamaguchi University School of Medicine. (Director : Prof. Dr. KOICHI ISHIGAMI) Ube, Yamaguchi, Japan.

Arch Jap Chir 48, 3~20, 1979.

The lymphnode metastases of esophageal carcinoma has been one of the important factors that deteriorated the remote result of operation for esophageal carcinoma. To cope with these lymphnodes metastases, especially in the upper-mediastinum and on the opposite side of the thoracotomy, the author experimentally examined the method by which Bleomycin was infused continuously into the thoracic duct in the normal and the opposite directions of the lymph flow, and tried to improve the remote results of operation for esophageal carcinoma.

On these methods, especially the normograde infusion mothod of BLM into thoracic duct, the distribution of BLM was found at high levels in the thoracic regional lymphnodes in dogs, such as No. 105 No. 106, No. 107 and No. 109. But BLM concentration in the lungs remained at a low level. From these results, it made clear that the infusion methods of BLM into the thoracic duct were useful for the postoperative local adjuvant chemotherapy for esophageal carcinoma.

山口大学医学部外科学教室第2講座 村上通治

## **Intestinal Valve by Telescoping Anastomosis and Non-transected Muscular Valve**

KISAKU SATOMURA, YOSHIHIKO KISAKA, HANG-LONG ZHENG, SATOSHI OHNISHI, TOSHISADA KANAZAWA, KOICHI TANAKA, NOBUHIKO TANIGAWA, MASAO NAKAZORA and HIROHISA MUROYA

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Arch Jap Chir 48, 21~32, 1979.

Intestinalval ves by the telescoping anastomosis and non-transected muscular type were constructed in dogs. Histological study and microangiographic studies showed well preserved tissue structure of the valve segment. Competence of the valve was observed by manometric evaluation.

Thirteen patients were operated for the construction of the valve all of them except one case, who was relaparatomized because of adhesions ileus around the anastomosis, showed satisfactory results.

## **Clinical and Experimental Studies of the Effects of Anticancer Agents on the Small Intestinal Mucosa**

TADASHI SEKIMOTO

Department of Surgery, Osaka Medical College. Takatsuki, Osaka, Japan.

Arch Jap Chir 48: 33~59, 1979.

Clinical and experimental studies were performed in order to investigate the effects of anticancer agents on the small intestinal mucosa. With administration of anticancer agents morphological changes of the intestinal mucosa consist of villous shortening, decrease of crypt cell mitoses, increasing edema, decrease of goblet cells and paneth cells. As the interference of mucosal enzyme activity, the decrease of lactase was most prominent. With discontinuation of anticancer agent, morphological mucosal damage improved within relatively short time, while the decrease of the activity of disaccharidases still remain even after prolong time.

大阪医科大学一般・消化器外科教室 関本 優

## **Surgical Treatment of Thoracic Aortic Aneurysm**

HISAACI KOIE and KENJI KUSUHARA

Department of Cardiovascular Surgery, Tenri Hospital. Tenri, Nara, Japan.

YORINORI HIKASA

The 2nd Department of Surgery, Faculty of Medicine, Kyoto University. Sakyo-ku, Kyoto, Japan.

Arch Jap Chir 48: 60~72, 1979.

Replacement with prosthetic graft was performed in seven patients of thoracic aortic aneurysm. These cases were studied. For the purpose of preventing from postoperative respiratory complications, our present way of approach which comprised left thoracotomy, avoidance of transection of sternum and to leave the lower portion of sternum unsplit, as well as the employment of temporary bypass in combination with hypothermia of 30°C by surface cooling method might be very appropriate.

## Clinical Study of Myocardial Protection During Open Heart Surgery

YUTAKA KONISHI, NORIKAZU TATSUTA, SHIGEHITO MIKI, MITSUHIKO MATSUDA, HIROSHI ISHIHARA, TEIICHI TANIGUCHI, YOSHISADA SHIRAISSI, NOBUYOSHI DAITO, KINYA YAMADA, SHINJI MURATA, KATSUHIKO MURATA, KATSUHIKO MATSUDA, YUKIO CHIBA, CHIN-TZER KAO, MINORU AOSHIMA and YORINORI HIKASA

The 2nd Department of Surgery, Faculty of Medicine, Kyoto University

HISAAKI KOIE Department of Cardiovascular Surgery, Tenri Hospital

TOSHIHIKO BAN Department of Cardiovascular Surgery, Kokura Memorial Hospital

YOSHIO YOKOTA Department of Cardiovascular Surgery, Hyogo Kenritsu Amagasaki Hospital

YOSHIO KANZAKI Department of Cardiovascular Surgery, Himeji National Hospital

HITOSHI SHIROTANI Department of Cardiovascular Surgery, Kinki University Hospital

Arch Jap Chir 48: 73~84, 1979.

A total of 3568 patients who underwent open heart surgery during the past 12 years were retrospectively analyzed from the standpoint of myocardial protection. The risk factors in each method were clarified and discussed.

京都大学医学部外科学教室第2講座 小西 裕, 龍田憲和. 他19名

## Silk as the Nidus for the Formation of Gallstones

Yozo AOKI and MASAHIRO KATSUMI

Department of Surgery (Gastroenterological Division), Wakayama Medical College, Wakayama City, Wakayama 640, JAPAN

Arch Jap Chir 48: 85~91, 1979.

A case of migration of silk ligatures into the biliary way and 3 cases of gallstone formation caused by using silk sutures or ligatures in the primary surgery for gallstone diseases are reported.

It is advisable that sutures or ligatures with nonabsorbable material should not be done in the biliary tract surgery since they may migrate into the biliary ductal system and signs and symptoms resembling biliary colic develop or lead to calculus formation.

## A Review of the Surgical Cases in the Newborn and Infancy at a Country Hospital

KEIBUN HARA, KAZUHIRO MARUHASHI, HIROKAZU JUJO and IKUO ISEKI

Surgical and Pediatric Department of Nagahama Red Cross Hospital, Nagahama, Shiga, Japan.

Arch Jap Chir 48: 92~97, 1979.

During the past 11 years, the pediatric surgery was performed in 81 patients with a variety of diseases in the newborn and infancy at Nagahama Red Cross Hospital.

Sixty one of 81 cases on reviewing were still alive and healthy, though the period of follow up study was brief in some patient. The remaining 20 cases died early or late postoperatively. Over all mortality rate was estimated at 25 per cent in our entire series.

Two rare cases were reported in detail; the first was recent experience with a newborn baby with extensive rupture of the stomach necessitating a total gastrectomy and the second, a single case of congenital fibrosarcoma arising in the rectum in male infant.

長浜赤十字病院外科 原 慶文, 丸橋和弘, 重城博一

長浜赤十字病院小児科 井関郁夫

## An Experience of IVH combined with FOY Administration in Upper Digestive Tract Fistula

HIROYASU KATSUDA, KOHSHIN UEDA, HIROAKI KAWASHIMA, SHUNSAKU TABUSE, YASUHIRO UHEYAMA, SHIGEYA ARIMOTO, TAKEHIRO UHEYAMA and YUKIO NAITO

Department of Surgery, Wakayama Red Cross Hospital. Wakayama, Japan.

Arch Jap Chir 48: 98~103, 1979.

A 48-year old man underwent surgery for adhesive ileus. Since a duodenal fistula was formed, IVH was instituted while in a fasting state. The administration of IVH alone gave no indication of bringing about spontaneous closure of the fistula even should the treatment be continued for more than a month.

As one of the local factors which prevent fistular closure, the proteolytic enzyme is believed to cause erosion of the wall of the fistula, resulting in delayed healing. On this assumption FOY which is a protease inhibitor was given systemically. This resulted in a day-by-day reduction in the amount of peritoneal drainage with closure of the fistula on the 7th day of FOY administration.

和歌山赤十字病院外科 勝田仁康, 上田耕臣, 川嶋寛昭, 田伏俊作, 上山康弘, 有本重也, 上山健弘, 内藤行雄

## **Successful Surgical Correction of a Complete Atrioventricular Canal with Preoperative Pulmonary Edema**

HIDETAKA OKU, HITOSHI SHIROTANI, TATSURO YOKOYAMA, JUN KAWAI, KAZUNARI NOGUCHI, TAKASUMI NISHIOKA, TOHRU SHINOHARA, TOSHIHIKO SAGA and SHUNJI HORIO

Department of Cardiovascular Surgery, Kinki University, School of Medicine (Director: Professor Dr. HITOSHI SHIROTANI) Sayama, Minami-Kawachi, Osaka, 589, Japan.

Arch Jap Chir 48, 104~110, 1979.

In a 23 month old boy with a C-type complete atrioventricular canal with severe pulmonary hypertension respiratory infection occurred and he developed respiratory failure and cardiac arrest while awaiting elective surgery.

Resuscitation was a success but a pulmonary edema was evident and progressed despite intensive conservative therapy for two weeks. Intracardiac repair was performed by the method of Shirotani et al. Postoperative investigations revealed the hemodynamics to be satisfactory.

Pulmonary edema accompanied by severe heart disease requires surgical correction of the cardiac anomaly as the conservative approach has proven to be ineffective.

近畿大学医学部心臓外科学教室 奥 秀壽, 城谷 均, 横山達郎, 河井 淳, 野口一成,

西岡孝純, 篠原 徹, 佐賀俊彦, 堀尾俊治

**Oxygen Distribution during Extracorporeal Oxygenation for Acute Respiratory Failure—Comparison between Venoarterial and Venovenous Bypass**

MITSUHIKO MATSUDA The 2nd Department of Surgery, Faculty of Medicine, Kyoto University (Director: Prof. Dr. YORINORI HIKASA) Sakyo-ku, Kyoto, Japan.  
Arch Jap Chir 48: 121~134, 1979.

Exacorporeal circulation with a membrane oxygenators one of the treatments for respiratory failure. The site of cannulation and the rate of perfusion are important factors for the success of extracorporeal oxygenation in oxygen distribution. In this study, several types of venoarterial and venovenous bypass circuits are compared in an experimental model with pulmonary edema induced by oleic acid.

Venovenous bypass achieved more effective oxygenation at the aortic root than any type of venoarterial bypass.

京都大学医学部外科学教室第2講座 松田光彦

**Studies on Postoperative Pulmonary Complications after Surgery for Esophageal Cancer: Especially the Relationship between the Vagus Nerve and the Pulmonary Complication. Part 2 · Experimental Investigation**

TAKUO MURAKAMI The 2nd Department of Surgery, Yamaguchi University School of Medicine (Director : Prof. Dr. KOICHI ISHIGAMI) Ube, Yamaguchi, Japan.  
Arch Jap Chir 48: 135~159, 1979.

In the previous clinical report, it was suggested that injury of branches of the vagal nerve and the posterior pulmonary plexus and interruption of the pulmonary lymph flow played important roles in the occurrence of the postoperative pulmonary complications.

Therefore, the author studied pulmonary changes in guinea pigs after bilateral cervical vagotomy such as the water content of the lung by Eaton's method, microscopic findings of the lung stained with hematoxyline and eosin, fluorohistological changes using FITC dextran and the determination of dextran in the lung with the anthrone reagent, etc.

**A New Operative Procedure of Hepatic Surgery Using a Microwave Tissue Coagulator**

KATSUYOSHI TABUSE Department of Gastroenterological Surgery, Wakayama Medical College (Chief: Prof. Dr. MASAHIRO KATSUMI) Wakayama, Japan.  
Arch Jap Chir 48: 160~172, 1979.

Partial resection of fifty-two liver lobes was performed on twenty-six rabbits using my newly devised, microwave coagulator to make a coagulation layer, and to cut in the middle of this layer. No suture or other foreign materials were employed. Complete control of bleeding from the parenchyma was obtained without vascular hemorrhage or bile leakage. Autopsy performed one day to six months postoperatively revealed satisfactory healing without infection in all animals except one. The experiment indicates that hepatic resection by this applicator is valuable in controlling blood and bile leakage from the hepatic parenchyma.

和歌山医科大学消化器外科学教室 田伏克博

**A New Artificial Intestinal Valve in the Dog: Its Comparative Function with the Intussuscepted Conical Valve and the Mucosal Valve**

SATOSHI OHNISHI The 2nd Department of Surgery, Faculty of Medicine, Kyoto University (Director : Prof. Dr. YORINORI HIKASA) Sakyo-ku, Kyoto, Japan.  
Arch Jap Chir 48: 173~187, 1979.

A new artificial intestinal valve, referred to as the "muscular valve", was reported, and studied comparatively with the other two intestinal valves by invagination procedure, the intussuscepted conical valve and the mucosal valve. The author recommends the "muscular valve" as a postoperatively eventless, little stenotic and perfectly effective intestinal valve rather than the other two valves. And its clinical use was discussed.

## An Experimental Study on Intrathecal Injection of Fibrinolytic Agent for Angospasm following Subarachnoid Hemorrhage in the Dogs

YASUAKI YOSHIDA, TATUO HAYASHI, MASASHI AMO, MICHIO AOKI,  
KOJI KUSUNO, EISEI LEE and TOSHIROH UNO

The 2nd Surgical Deprement, St. Marianna University of Medicine, Kawasaki,  
Kanagawa, Japan.

HAJIME HANDA Department of Neurosurgery, Faculty of Medicine, Kyoto University  
Sakyoku, Kyoto, Japan

Arch Jap Chir 48 : 188~196, 1979.

The study of the fibrinolytic activity of the C.S.F. suggested that the intrathecal injection of the plasmin is the most reasonable way for the lysis of the subarachnoid clot. Based on this result, plasmin and Urokinase were injected on the dogs 2-4 days after induced subarachnoid hemorrhage(S.A.H.). The grade of angospasm was estimated by angiography.

Then, the dosis of clot in the basal cistern was inspected on the autopsy.

Through these observations, the effect of intrathecal injection of plasmin on the angospasm following the S.A.H. was ascertained.

聖マリアンナ医科大学第2外科・脳神経外科 吉田康成, 林 龍男, 天羽正志, 青木道夫,  
楠野幸次, 李 英成, 宇野俊郎, 京都大学医学部脳神経外科学教室 半田 肇

## Treatment of severe subarachnoid bleeding-importance of the erythrocytes in the subarachnoid space and their removal

KUNIHIKO OSAKA, SHINICHIRO OKAMOTO and HAJIME HANDA  
Department of neurosurgery, Faculty of Medicine Kyoto University. (Director:  
Prof. Dr. HAJIME HANDA) Sakyō-ku, Kyoto, Japan.

Arch Jap Chir 48: 197~204, 1979.

For the treatment of ruptured aneurysm, most effort has been concentrated to prevent re-rupture of the aneurysm. However, it is also important to protect the brain from the adverse effect of the extravasated erythrocytes, because lysed erythrocytes induce severe meningeal irritation as well as cerebral vasospasm which leads to ischemia of the brain. The fate of the subarachnoid erythrocytes and the previous efforts to remove these erythrocytes were reviewed. It was emphasized that more aggressive trial to remove the subarachnoid erythrocytes is necessary in the patients with severe subarachnoid hemorrhage.

## Experimental Evaluation of Assisted Extracorporeal Circulation for Pulmonary Failure in Dogs with Special Reference to Hemodynamic Changes

NAOFUMI TOMOSAWA The 1st Department of Surgery, Yamaguchi University School of Medicine (Director: Prof. Dr. RIKIO YAMAKI) Ube, Yamaguchi, Japan.

Arch Jap Chir 48 : 205~216, 1979.

In severe hypoxicemic dogs with a continuous inhalation of 6% oxygen-mixed gas, the venovenous perfusion increased the intrapulmonary shunt rate and the burden upon the pulmonary circulation. On the contrary, this maneuver did not adversely affect the systemic circulation and did not cause severe left ventricular dysfunction because of good coronary arterial oxygen delivery.

The venoarterial perfusion caused increasing systemic circulatory disturbance as the flow rate increased, though it lightened the burden upon the pulmonary circulation.

山口大学医学部外科学教室第1講座 支澤尚文

## Experimental and Clinical Studies on the Secretory Response of Plasma Glucagon After Total Pancreatectomy

TAKAAKI SUDO The 1st Department of Surgery, Faculty of medicine, Kyoto University (Director: Prof. Dr. TAKAYOSHI TOBE) Sakyō-ku, Kyoto, Japan.

Arch Jap Chir 48 : 217~232, 1979.

Clinical and experimental studies were carried out on plasma glucagon after total pancreatectomy in three patients with carcinoma of the pancreas and in dogs.

An arginine test was conducted one, two and three weeks after surgery, and serum glucagon and blood glucose were measured.

The effect of exogenous and endogenous secretin on the plasma glucagon reacting to 30K antibody was investigated in totally pancreatectomized dogs.

## **Ultrasonic Diagnosis of the Abdomen in Children —Ovarian Tumors in Children—**

**SETSUO TAKEUCHI, and MUNEYUKI YAMAGUCHI**

The 2nd Department of Surgery, Toho University School of Medicine (Director : Prof. Dr. SABURO AWAZU) Ota-ku, Tokyo, Japan.

Arch Jap Chir 48 : 233~242, 1979.

Ultrasonography was applied to 4 pediatric patients with ovarian tumors. The masses were classified into three ultrasonic patterns ; solid, cystic, and mixed. In diagnosing pediatric patients with abdominal masses, ultrasound examination is very important. It gives us substantial and accurate information as to the size, contour, position and internal composition of masses. This information is not only necessary for differential diagnosis as to whether masses are benign or malignant but also important for the program of future treatment.

東邦大学医学部第2外科学教室 竹内節夫, 山口宗之

## **Effect of an Artificial Intestinal Valve on Intestinal Adaptation in the Rat**

**YOSHIHIKO KISAKA**

The 2nd Department of Surgery, Faculty of Medicine, Kyoto University. (Director : Prof. Dr. YORINORI HIKASA) Sakyo-ku, Kyoto, Japan.

Arch Jap Chir 48, 261~288, 1979.

The effect of intestinal valve by telescoping anastomosis was studied with Kyoto University Wistar rats. For elucidating the intestinal adaptation, studies were done under the conditions of (1) fasting, (2) ileostomy with or without total colectomy (3) ileostomy with the intestinal valve, on body weight change, hematology, serum chemistry, and morphological change of the intestinal epithelium.

Results were as follows : 1) From the comparison of body weight curves, it may be concluded that the intestinal valve encourages the intestinal adaptation of rats with ileostomy of which absorptive function is lowered.

2) The intestinal adaptation is encouraged by the intestinal valve by its stagnation effect of the intestinal content and by increased epithelial growth at the ileum which show marked increase of elongated microvilli.

3) In the well adapted rats, elongated microvilli appear as scattered focal growth. Diffuse elongation of microvilli is observed in rats under starvation. The length of elongation of the microvilli is shorter than in the well adapted rats.

京都大学医学部外科学教室第2講座 木阪義彦

## **Reconstruction of Mitral Valve With Regurgitation due to Ruptured Chordae Tendineae of Anterior leaflet**

SHIGEHITO MIKI, NORIKAZU TATSUTA, YUTAKA KONISHI, KAZUAKI MINAMI, MITSUHIKO MATSUDA, HIROSHI ISHIHARA, TEIICHI TANIGUCHI, YOSHISADA SHIRASHI, KATSUHIKO MATSUDA, SHINJI MURATA, KATSUHIKO MURATA, YUKIO CHIBA, CHIN-TZER KAO and YORINORI HIKASA  
The 2nd Department of Surgery, Faculty of Medicine, Kyoto University. (Director : Prof. Dr. YORINORI HIKASA) Sakyo-ku, Kyoto, Japan.

**KEITA SUEKANE**

Department of Anestegiology, Faculty of Medicine, Kinki University, Minamikawachi, Osaka, Japan.

Arch Jap Chir 48, 289~296, 1979.

Experience with surgery of the mitral valve apparatus with ruptured chordae tendineae of the anterior leaflet is reviewed from the view point of feasibility of reconstructive surgery. Valvuloplasty combined with annuloplasty reduced regurgitation to an acceptably small grade. Plastic repair of this type of mitral valve is applicable when the site of the rupture is eccentric, number of ruptured chordae is small and the leaflet tissue is pliable.

京都大学医学部外科学教室 三木成仁, 龍田憲和, 小西 裕, 南 一明, 松田光彦, 石原 浩谷口亨一, 白石義定, 松田捷彦, 村田真司, 村田雄彦, 千葉幸夫, 高 欽澤, 日笠頼則  
近畿大学医学部麻酔学教室 末包慶太

## **Anatomical Consideration in the Surgical Treatment of Type III Ventricular Septal Defect (Atrioventricular Canal Type)**

**MICHIO YOKOTA, RYUSUKE MURAOKA, MASATAKA OSARAGI, MINORU AOSHIMA, INSHIN KYOKU, SHINICHI NOMOTO, HIROYUKI NAKANO, KEN UEDA and AKIHIRO SAITO**

Department of Cardiovascular Surgery and Department of Pediatric Cardiology, Shizuoka Children's Hospital, Shizuoka, Japan.

Arch Jap Chir 48, 297~310, 1979.

Fourteen operated cases (7 with Down syndrome, one death) and 2 non-surgical autopsied cases (both with Down syndrome) with ventricular septal defect type III (by Kirklin's classification) were reported. Characteristic anatomical features were : (1) location of the defect below the papillary muscle of the conus, (2) posteroinferior corner of the defect attached by the septal leaflet, and (3) occasional bridging chordae in the middle of the defect. Injury to the conduction system was avoided by placing sutures using this attached septal leaflet. This type of VSD can be easily closed through the right atrium if the chordae crossing the defect are properly managed.

静岡県立こども病院心臓血管外科 横田通夫, 村岡隆介, 大仏正隆, 青嶋 実, 曲人伸, 野本慎一,

循環器科 中野博行, 上田 憲, 斎藤彰博

## **Echocardiographic Follow-up Study on Congenital Mitral Uncompetence after Mitralannuloplasty**

**KAZUAKI MINAMI**

The 2nd Department of Surgery, Faculty of Medicine, Kyoto University (Director : Prof. Dr. YORINORI HIKASA) Sakyo-ku, Kyoto, Japan.

Arch Jap Chir 48, 311~332, 1979.

Mitral annuloplasty (MAP) has been performed in 17 cases with congenital mitral incompetence (MI) except endocardial cushion defect. Pre- and post-operative and long-term (less than 7.2 years) echocardiograms have been recorded and compared serially with Amp, DDR, LAD, IVSE and LVOTD. These factors are compared also with the grade of MI determined by angiography. It has been echocardiographically proved that most of mitral valves followed annuloplasty itself enlarge with physical growth in the state of the favorable hemodynamics.

Echocardiography is very useful and can be alternative for angiography in follow-up study of congenital MI after MAP.

## **Human Umbilical Cord Vein Graft as Aortic Replacement in the Dog : Evaluation of Its Treatment, Morphology and Antigenicity**

**KIYOSHI SHINTANI**

The 1st Department of Surgery, Yamaguchi University School of Medicine (Director : Prof. Dr. RIKIO YAMAKI)

Arch Jap Chir 48, 333~347, 1979.

Human umbilical cord vein graft tanned with glutaraldehyde were implanted in the infrarenal abdominal aorta of 40 dogs. The grafts were removed in two weeks to six months after the implantation for morphologic studies.

Microscopically, the structural integrity of the grafts was well preserved. The immature endothelial cells were appeared in a month at the anastomotic sites. However, no endothelial cells were found more than 5mm from the suture lines. Cytotoxic tests showed that antigenicity of the graft was effectively suppressed with glutaraldehyde.

山口大学医学部外科学教室第1講座 新谷 清

## **Experimental Study of Mitral Annuloplication**

**HISAAKI KOIE**

The Department of Cardiovascular Surgery, Tenri Hospital

Arch Jap Chir 48, 348~353, 1979.

Using 28 isolated canine hearts, left heart was perfused with saline water under constant pressure. The percentile decrease of mitral valve flow by annular plication was far less in the heart with subvalvular stenosis than in normal heart. This suggests that the stenosis caused by the plication of the annulus may be masked by preexisting subvalvular stenosis.

## **Studies on Thrombolytic Therapy for Venous Thrombosis in the Extremities-Dynamics of Plasmin Inhibitor and FDP Following Administration of Urokinase**

**SETSUO TAKEUCHI and TADAOKI SHIBA**

The 2nd Department of Surgery, Toho University, School of Medicine (Director : Prof. Dr. SABURO AWAZU) Ota-ku, Tokyo, Japan.

Arch Jap Chir 48, 354~361, 1979.

FDP and plasmin inhibitor activity following administration of urokinase were determined experimentally and clinically. Also, 17 cases of venous thrombosis in which the patients only thrombolytic therapy with urokinase were investigated. FDP increased and plasmin inhibitor activity decreased following administration of 24,0000 to 36,000 of urokinase. In thrombolytic therapy it is important to decrease plasmin inhibitor activity and increase FDP.

東邦大学医学部第2外科講座 竹内節夫, 柴 忠明

## **Myelography of Lumbar Spinal Canal Stenosis: Complication of Methylglucamine Iocarmate (Dimer-X) and Iophendylate (Myodil)**

**AKINORI KONDO, TOSHIKI YAMASAKI, TSUNEMARO KOYAMA and JUNICHIRO ISHIKAWA**

Department of Neurosurgery, Fukui Red Cross Hospital

Arch Jap Chir 48, 362~371, 1979.

Myelograms of 40 cases of lumbar spinal canal atenosis were studied.

- 1) Myelogram with Myodil (23 cases) revealed that nerve roots were well identified in 14 cases and fibers of cauda equina were well visualized in only 9 cases, only when these patients accompanied remarkable degenerative changes of spine.
- 2) All myelograms with Dimer-X (17 cases) well detailed the shadow of nerve roots and filaments of cauda equina, even the serpentine filling defect.
- 3) Functional myelography with Dimer-X is much helpful for understanding the fine structural changes of nerve elements in lower lumbar region.
- 4) There was little difference between these two contrast media as for the early postmyelographic complications.

## Surgical Treatment of Common Atrium Associated with Asplenia, with Special Reference to the Abnormal Conduction System

NORIKAZU TATSUTA, HIROSHI ISHIWARA, SHIGEHITO MIKI, YUTAKA KONISHI, MITSUHIKO MATSUDA, SHINJI MURATA, CHIN-TZER KAO and YORINORI HIKASA

The 2nd Surgical Department, Faculty of Medicine, Kyoto University (Director : Prof. Dr. YORINORI HIKASA), Sakyo-ku, Kyoto, Japan.

KEITA SUEKANE

Department of Anestegiology, Faculty of Medicine, Kinki University, Minamikawachi, Osaka, Japan.

Arch Jap Chir 48, 372~381, 1979.

Recently we performed open heart surgery on a 3-year-old boy with asplenia associated with situs ambiguus with levocardia, absent inferior vena cava, azygous connection, common atrium, and an abnormally situated atrio-ventricular node. The abnormally located coronary vein ostium drained into the hepatic vein below the right atrium. An electrophysiological mapping during surgery revealed that the AV node was in the hepatic vein ostium, and the bundle of His ran from here to the ventricular crest via the right atrial-hepatic vein junction. We could avoid surgical AV block by partitioning the common atrial chamber so that the hepatic vein drain into the left side of the heart. The patient is now very active and leads a unlimited life without AV block.

京都大学医学部外科学教室第2講座 龍田憲和, 石原 浩, 三木成仁, 小西 裕, 村田真司, 高 欽澤, 日笠頤則 近畿大学医学部麻酔学教室 末包慶太

## Surgical Treatment of Wolf-Parkinson-White Syndrome, a Report of Three Cases

NORIKAZU TATSUTA, SHIGEHITO MIKI, YUTAKA KONISHI, MITSUHIKO MATSUDA, TEICHI TANIGUCHI, HIROSHI ISHIWARA, SHINJI MURATA, CHIN-TZER KAO and YORINORI HIKASA, The 2nd Surgical Department, Faculty of Medicine, Kyoto University (Director : Prof. Dr. YORINORI HIKASA), Sakyo-ku, Kyoto Japan. TOMOTSUGU KONISHI and EIICHI MATSUYAMA The 3rd Department of Medicine, Faculty of Medicine, Kyoto University. KEITA SUEKANE Department of Anestegiology, Faculty of Medicine, Kinki University, Minamikawachi Osaka, Japan.

Arch Jap Chir 48, 382~392, 1979.

We have successfully treated three patients with the WPW syndrome by surgical division of the KENT bundle. Two of the three also had EBBSTEIN's anomaly, which was treated simultaneously. We used our own electrophysiologisal diagnostic equipment to map the heart during operation. Two patients had a posterior septal KENT bundle, and one a right free wall KENT bundle. In one case, postoperative His bundle study suggested existence of another weak retrograde conducting His bundle.

京都大学医学部外科学教室第2講座 龍田憲和, 三木成仁, 小西 裕, 松田光彦, 谷口亨一 石原 浩, 村田真司, 高 欽澤, 日笠頤則

京都大学医学部内科学教室第3講座 小西興承, 松山栄一

近畿大学医学部麻酔学教室 末包慶太

## A Case of Intracranial Fibromuscular Dysplasia Associated with Increased Antibody for Rubella

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Department of Neurosurgery, Kyoto City Hospital

Arch Jap Chir 48, 393~399, 1979.

A 20-year old postpartem patient presented with severe headache and convolution. Cerebral angiography revealed multiple constrictions and dilatations. Same changes, although less in intensity, were observed 9 days later with repeated angiography. High voltage slow waves were observed in EEG, although the patient was alert. No blood, xanthochromia, nor change in protein and glucose was detected at repeated spinal taps. High fever with leucopenia developed. Antibody for rubella was high and decreased after subsidence of fever. Biopsy of superficial temporal artery confirmed the diagnosis of fibromuscular dysplasia. Possible causal relationship of rubella infection with fibromuscular dysplasia is discussed.

京都市立病院脳神経外科 寺浦哲昭 寺野允将 内田泰史 大塚信一

## Clinical Effect of a New 1-4-Dihydropyridine Derivative, YC-93, in Patients with Cerebrovascular Diseases

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Department of Neurosurgery, Shiga University of Medical Science, Ohtsu, Japan.

TSUNEMARO KOYAMA, Ohtsu Municipal Hospital, Ohtsu, Japan.

HIROSHI TSUJI, YUTAKA ISHIIJIMA, Kyoto National Hospital, Fushimi-ku, Kyoto, Japan.

TETSUAKI TERAURA Kyoto Municipal Hospital, Nakagyo-ku Kyoto, Japan.

Arch Jap Chir 48, 400~403, 1979.

A new derivative of 1,4-dihydropyridine, YC-93, has been proved to be a potent vasodilator in various kinds of experimental animals as well as in healthy volunteers. Sixty mg of YC-93 in three divided dosages was given to 32 patients with cerebrovascular diseases for 4 weeks, and its clinical effects were examined. This pilot study has proved that YC-93 is a valuable therapeutic agent in improving chronic subjective complaints due to cerebrovascular ischemia, with minimal side effects.

滋賀医科大学脳神経外科 半田謙二 大津市民病院脳神経外科 小山素麿

国立京都病院脳神経外科 辻 宏, 石島 裕

京都市立病院脳神経外科 寺浦哲昭

## A Case of Breast Sarcoid

MASAAKI SHINODA, SHINHACHIRO NOMI

Department of Surgery, Gifu College of Dentistry

KAZURO IWAI

Research Institute of Tuberculosis, Japan Antituberculosis Association

TAKATERU IZUMI

Chest Disease Research Institute, Kyoto University

Arch Jap Chir 48, 404~410, 1979.

A 50-years-old farm wife with the diagnosis of sarciod of the breast based on the histology of the resected specimen of a tumor of the right breast (measuring 5 × 3 cm) was treated by the authors.

The involvement of the breast by sarcoidosis has been regarded extremely rare since the first report by Scott (1938), and no such case has ever been reported in Japan.

岐阜歯科大学外科 篠田正明, 能見伸八郎 結核研究所病理 岩井和郎

京都大学結核胸部疾患研究所内科 泉 英孝

## Postoperative Hyperthermia in Neurosurgical Practice

TETSUAKI TERAURA, MITSUMASA TERANO, YASUFUMI UCHIDA and

SHINICHI OTSUKA

Department of Neurosurgery, Kyoto City Hospital, Kyoto.

Arch Jap Chir 48, 411~418, 1979.

Postoperative hyperthermia is usually encountered in severe head injury, in massive intracranial bleeding or in patients with tumors around brain stem and hypothalamus. Four cases are presented. Onset of hyperthermia, together with vegetative storm such as tachycardia and hyperpnea and deep coma are described. Differential diagnosis, etiology of fever, and methods of treatment are discussed. Hyperthermia is associated with increase in cerebral metabolism and brain tissue becomes relatively ischemic. Hyperthermia should be treated to protect brain from ischemic infarction. Demerol and promethazine were used successfully.

### **Scanning Electron Microscopic Study of Intravenous Fat Emulsions**

HIROSHI TANIMURA, KICHIRO MIKI and YORINORI HIKASA

Second Department of Surgery, Faculty of Medicine, Kyoto University (Director : Prof. Dr. YORINORI HIKASA) Sakyo-ku, Kyoto, Japan.

Arch Jap Chir 48 : 439~449, 1979.

Fat particles in clinically used intravenous fat emulsions could be observed as flawless globular forms by scanning electron microscopy.

The one-step fixation with a combination of glutaraldehyde-malachite green and osmium tetroxide was the most effective.

Six commercial intravenous fat emulsions were compared by this staining method. Some fat emulsions were found to contain particles larger than 1 micron in diameter, while Fatgen-D had more uniform particles than the other fat emulsions.

This method may be useful in the quality control of fat emulsions.

京都大学医学部外科学教室第2講座 谷村 弘, 三木毅一郎, 日笠頬則

### **High Aortoiliac Occlusion**

YOSHIFUMI OKAMOTO and KIMIYA YAMADA

The 1st Department of Surgery, Shimane Medical University, Izumo, Shimane, Japan.

AKIHIKO NOZAKI, HIROKI OGAWA, EIJI TANAE and HIROSHI WATANABE

Surgical Department of Ohtsu Red Cross Hospital, Ohtsu, Shiga, Japan.

Arch Jap Chir 48 : 450~458, 1979.

Four cases of high aortoiliac occlusion have been presented in some detail.

Where impairment of renal function becomes manifest during course of Leriche syndrome, it is necessary to take appropriate therapeutic measures, e.g. surgery for reestablishment of blood flow through the narrowed or occluded segment, as early as possible on the basis of reliable aortographic findings. Benefit that may be elicited from hemodialysis in the preparation of the patient for surgery should also be considered.

島根医科大学第1外科 岡本好史, 山田公弥

大津赤十字病院外科 野崎昭彦, 田苗英次, 小川博暉, 渡辺 裕

### **The Biochemical Analysis of the Experimental Tumor Tissues of the Rat Brain Induced by Etylnitrosourea**

MIKIRO MATSUMOTO

Second Department of Surgery, School of Medicine, Toho University (Director : Prof. Dr. SABURO AWATSU) Omori-Nishi, Ohta-ku, Tokyo, Japan.

Arch Jap Chir 48 : 459~470, 1979.

Biochemical examinations of ENU-induced tumor tissues in the rats was performed. Some biochemical characteristics were obtained, by comparing with the experimental gliosis tissues,

- 1) The tissue protein contents were within the control level.
- 2) RNA and DNA contents were apparently increased and RNA/DNA ratio were extremely decreased.
- 3) Of free amino-acid contents, aspartic acid, glutamic acid and GABA were decreased, while glutamine, glycine and alanine increased. GABA was not determined in 50% cases of it.
- 4) Lysosomal enzyme activities were demonstrated in extremely high level.

東邦大学医学第2外科学教室 松元幹郎

### **The Biochemical Studies on Glioma—The Analyses round about role of DBc-AMP in tumor cell**

SADATSUGU NAGASAWA

Second Department of Surgery, School of Medicine, Toho University (Director : Prof. Dr. SABURO AWATSU) Omori-Nishi, Ohta-ku, Tokyo, Japan.

Arch Jap Chir 48 : 471~483, 1979.

Glioma cells were studied by biochemical analysis for the purpose of chemotherapy of cerebral malignant tumors. In the patients suffering from astrocytoma grade-IV (glioblastoma multiforme), Dibutyryl adenosine-3',5'-cyclic monophosphate was administrated I. A. and/or I. V.

Protein content increased approximately 30%, nucleic acid, RNA decreased 2.66 to 2.41 mg/wet weight, DNA decreased 2.16 to 1.45 mg/g wet weight. RNA/DNA ratio was lower and free amino acid values were all very close to that of normal brain tissue. With lysosomal enzyme, Ac-P. activity was approximately 1/6 (411.3 to 66.4  $\mu$ g/mg protein/hour) and  $\beta$ -Glu. activity was held to 1/8 (40.8 to 4.7  $\mu$ g/mg protein/hour) of normal.

東邦大学医学部第2外科学教室 長澤貞継

## **Increased Intracranial Pressure and Tentorial Shear Strain**

HIROSHI GOTOH

Department of Neurosurgery, Faculty of Medicine, Kyoto University, (Director: Prof. Dr. HAJIME HANNA) Sakyo-ku, Kyoto, Japan.

Arch Jap Chir 48 : 484~497, 1979.

The tentorial herniation is caused by a pressure gradient between supra- and infratentorial compartments and the herniated brain receive a force, which is called a shear strain at the edge of tentorium. The purpose of the present study is to find out the relationship between the increased intracranial pressure, the pressure gradient and the tentorial shear strain.

Our dynamical study of the transtentorial herniation shows clearly that magnitude of the shear strain was greater as a local forced pressure than supra- and infratentorial pressure.

京都大学医学部脳神経外科学教室 後藤 弘

## **A Study on Non-specific Immunity of Breast Cancer Patients with Postoperative Irradiation**

SEIICHI KINOSHITA

Second Department of Surgery, Faculty of Medicine, Kyoto University (Director: Prof. Dr. YORINORI HIKASA) Sakyo-ku, Kyoto, Japan.

Arch Jap Chir 48 : 498~510, 1979.

The influences of postoperative irradiation on the immune capacity of patients with breast cancer were estimated by means of peripheral blood leucocyte, lymphocyte and T-cell counts and lymphoproliferative responses to PHA, Con-A and PWM.

Leucocyte, Lymphocyte and T-cell counts and response to PHA decreased gradually in progress with radiotherapy. This decrease persisted 3 weeks after end of radiotherapy. The grade of decrease of lymphocyte was more remarked than of leucocyte. In some cases, response to PHA temporally rised after start of irradiation. Response to Con-A was variant. Response to PWM was hardly affected by radiotherapy.

京都大学医学部外科学教室第2講座 木下誠一

## **Intoxication of Bile Acids and Intestinal Flora Concerning to Discussion with Complete Parenteral Nutrition**

TAKESHI KUYAMA

The Second Surgical Department of Medical School Kinki University, Sayama, Osaka, Japan.

Arch Jap Chir 48 : 511~516, 1979.

The postoperative patients of complete parenteral nutrition are nourished by the parenteral energy supply, in existences of intestinal flora. All of surgeons in the abdominal surgery must be aware of the very effective influences of the intestinal flora in our nutrition of parenteral and enteral feeding after surgery, especially, concerning to acute pancreatitis, pancreatic pseudocyst after chronic pancreatitis and woundhealing in anastomosis of colon.

近畿大学医学部第2外科学教室 久山 健

## **Peptic Ulcer and Glucose Homeostasis : I. Insulin, Gastrin and Glucagon Responses to Oral Glucose and Intravenous Arginine in Peptic Ulcer Patients**

AKIRA NAKAYASU

Department of Surgery, Mutsumi Hospital (Director: Dr. NOBUTAKA KUBOTA) Kameoka, Kyoto, Japan.

Arch Jap Chir 48 : 517~527, 1979.

Serum glucose, immunoreactive insulin (IRI), immunoreactive gastrin (IRGA) and immunoreactive pancreatic glucagon (IRGL) were measured following oral in gestation of 50 gm. glucose and following intravenous (i. v.) arginine injection in gastric ulcer patients with hyper-acidity (hyper-GU), normo-acidity (normo-GU), duodenal ulcer (DU) patients and normal subjects. Hyper-GU patients showed a normal hyperglycemic and hyperinsulinemic responses to oral glucose as did DU patients. IRGA response to i. v. arginine in hyper-GU patients was greater than that of DU. IRGL response to oral glucose and i. v. arginine was greatest in DU patients.

It is concluded that: 1) hyper-GU patients show abnormal glucose homeostasis as do DU patients, 2) hyper-GU may be caused by different etiology from normo-GU and DU, and gastrin may be more important factor in the etiology of hyper-GU than in that of DU, 3) glucagon may be one of the causative factors of abnormal glucose homeostasis of DU.

ムツミ病院外科 中安 顯

## **Prognosis of Colonic Carcinoma with Internal Fistula**

MASAHIRO KATSUMI, MUNEHIRO SHOJI, NOBUO TAKEI, YUJI KATSUBE,  
TOSHIRO YAMAGUCHI, YUZO OHSAWA, GOICHI MORIMOTO, KATSUYOSHI  
TABUSE, and SHINZO URA

Department of Surgery, Wakayama Medical College, Wakayama Japan.

Arch Jap Chir 48 : 528~534, 1979.

While stenosis, perforation and intussusception are well-known complications of cancer of the colon, fistula formation to other parts of the gastro-intestinal tract is considered rare. A retrospective analysis revealed that seven of 408 patients had fistula formation. These internal fistulae associated with colonic carcinoma tended to occur more frequently in the left hemicolon. The prognosis of patients with colonic carcinoma and fistulae was better when (a) the preoperative absolute lymphocyte count was greater than 2500, and a postoperative rise was documented; (b) a cellular-type stromal reaction was demonstrated; (c) resection of the colonic carcinoma and fistula was performed.

和歌山県立医科大学消化器外科 勝見正治, 庄司宗弘, 竹井信夫, 勝部育二, 山口敏朗,  
大沢祐三, 森本悟一, 田伏克博, 浦 伸三

## **Carotid-Superior Cerebellar Anastomosis : A Variant of Persistent Trigeminal Artery Associated with Cerebral Aneurysms and Angiomatous Malformation. Case Report.**

ISAO MATSUDA, JYODI HANNA, HAJIME HANNA and YASUHIRO YONEKAWA.

Depertment of Neurosurgery, Kyoto University Medical School and Hospital,

Arch Jap Chir 48 : 535~541, 1979.

A case of carotid-superior cerebellar artery anastomosis without an interposed segment of the basilar artery is reported. In addition to this rare vascular anomaly, two aneurysms, one at the origin of this anomalous vessel, and a small angiomatous malformation fed by the anterior inferior cerebellar artery were found in this patient.

## **A Case of Pancreatic Carcinoma Complicated by Pancreatic Abscess**

TADAKAZU YOH, KUREO TSUSHIMI

Department of Surgery Tsushima Hospital, Hagi, Yamaguchi, Japan.

Arch Jap Chir 48 : 542~546, 1979.

Recently a 48 year old woman complaining of abdominal pain, anorexia and body weight loss was admitted to our hospital and was diagnosed to have a tumor in the pancreatic body by ultrasonography and by endoscopic retrograde cholangiopancreatography. After the ERCP she began to show high fever and developed a very tender tumor in the upper abdomen.

On laparotomy, a large abscess was found in the omental bursa and the pancreatic body and tail was necrotic. The necrotic pancreas was resected and the omental bursa was drained. The surgical specimens showed adenocarcinoma of the pancreas. The postoperative course was uneventful and the patient was discharged after administration of anticancer drugs.

We should be always aware of possibility of evoking by ERCP acute pancreatitis and/or pancreatic abscess which can be quite lethal.

都志見病院外科 楊 忠和, 都志見久令男

## Experimental Study on the Effect of Essential Fatty Acid Deficiency on Pulmonary Surfactant

RYOKO TABATA

The 2nd Department of Surgery, Faculty of Medicine, Kyoto University (Director : Prof. Dr. YORINORI HIKASA), Sakyo-ku, Kyoto, Japan.

Arch Jap Chir 48 : 571~586, 1979.

The effect of essential fatty acid (EFA) deficiency on respiratory function was studied in rats. Increase in minimum surface tension of alveolar surfactant was induced by EFA deficiency. Total amount of phosphatidylcholine (PC) was not influenced but the content of palmitic acid which was a component of dipalmitoyl phosphatidylcholine (DPC) was decreased in EFA deficiency. DPC is the most effective substance as pulmonary surfactant. The conclusion was that EFA deficiency resulted in decrease in palmitic acid content of alveolar PC and lowered the efficiency of pulmonary surfactant.

京都大学医学部外科学教室第2講座 田畠良宏

## Circulatory Effects of Dobutamine and Dopamine in Dogs Following Experimental Injury of the Sino-Atrial Node

NORIKAZU TATSUTA, SHINZI MURATA, CHIN-TZER KAO, KATSUHIKO MATSUDA, YUKIO CHIBA, KATSUHIKO MURATA, TEIICHI TANIGUCHI, YOSHISADA SHIRAISHI, MITSUHIKO MATSUDA, YUTAKA KONISHI, SHI-GEHITO MIKI and YORINORI HIKASA

The 2nd Department of Surgery, Faculty of Medicine, Kyoto University, (Director : Prof. Dr. YORINORI HIKASA), Sakyo-ku, Kyoto, Japan.

Arch Jap Chir 48 : 587~601, 1979.

Dopamine and dobutamine increased cardiac output significantly after experimental injury of the S-A node. Dobutamine had relatively little chronotropic or peripheral vascular effect, caused only mild cardiac arrhythmia and tachycardia, and left systolic arterial pressure nearly unchanged. The cardiac arrhythmia caused by these two agents was antagonized by lidocaine.

We conclude that dobutamine is probably superior to dopamine in the treatment of low cardiac output associated with S-A node injury or the sick sinus syndrome.

京都大学医学部外科学教室第2講座 竜田憲和, 村田真司, 高欽澤, 松田捷彦, 千葉幸夫, 村田雄彦, 谷口亨一, 白石義定, 松田光彦, 小西裕, 三木成仁, 日笠頼則

## Evaluation of Myocardial Contractility During Open Heart Surgery for Assessing Prognosis in the Patients with Tetralogy of Fallot

KENJI KUSUHARA

Department of Cardiovascular Surgery, Tenri Hospital, Tenri, Nara, Japan.

Arch Jap Chir 48 : 602~617, 1979.

Instantaneous assessment of cardiac performance during open heart surgery was made on 38 pediatric patients with tetralogy of Fallot : they were classified into group A with favorable prognosis (29 cases) and group B with poor prognosis (9 cases including 5 deaths). Statistical analyses with the linear discriminant function revealed that the indices of myocardial contractility, especially in the left ventricle, measured after extracorporeal circulation yielded distinct differences in distribution of their values between the two groups. The author proposed critical values of these indices for assessing prognosis.

天理病院心臓血管外科 楠原健嗣

## Gnotobiotic Research of Experimental Surgery Concerned with a few-diseases of Abdominal Emergency

TAKESHI KUYAMA

The Second Department of Surgery, Kinki University, School of Medicine, Sayama, Osaka, Japan.

Arch Jap Chir 48 : 618~626, 1979.

This paper deals with experimental surgery of etiology concerned with ethionine acute pancreatitis and biliary diffuse peritonitis. The results of this research could clarify the following three conclusions. (a) at the germfree environment, ethionine acute pancreatitis of choline deficiency feeding is more severe than same attacks at the conventional environment. (b) Gnotobiotic acute pancreatitis always caused the perforation of cecum or appendix. (c) When perforation of cecum or appendix occurs, cecum contents of germfree mice were more toxic than ones of open room mice, because of the pathological metabolism of bile acids in the portal region.

近畿大学医学部第2外科学教室 久山 健

**Leiomyoma of the Stomach : A report of five cases and a collective review of 275 cases reported in Japan**

HITOYASU KATSUDA, KOHSHIN UEDA, HIROAKI KAWASHIMA, KUNIO ISHIMOTO, SHUNSAKU TABUSE, YASUHIRO UHEYAMA, SHIGEYA ARIMOTO, TAKEHIRO UHEYAMA and YUKIO NAITO

Department of Surgery, Wakayama Red Cross Hospital, (Director : Dr. YUKIO NAITO,  
Director of the Hospital, Chief of the Surgical Section)

Arch Jap Chir 48 : 627~638, 1979.

We have experienced five cases of gastric leiomyoma during the last six years in our hospital. We reported those cases and made a collective review on 275 cases of leiomyoma of the stomach reported in Japan.

和歌山赤十字病院 勝田仁康, 上田耕臣, 川嶋寛昭, 石本邦夫, 田伏俊作, 上山庸弘,  
有本重也, 上山健弘, 内藤行雄

**"Moyamoya" Vessels on the Tumor in the Sellar region**

MASATUNE ISHIKAWA, HAJIME HANADA, KOREAKI MORI and ISAO MATSUDA\*

Department of Neurosurgery, Faculty of Medicine, Kyoto University, Sakyo-ku, Kyoto, Japan. and Department of Neurosurgery, Shiga University of Medical Science, Otsu, Shiga, Japan.

Arch Jap Chir 48 : 639~644, 1979.

A rare case of tumor in the sellar region was reported, which was associated with bilateral stenosis of internal carotid arteries, "moyamoya" vessels on the suprasellar tumor, and transdural anastomosis. The present case showed that the tumor in the sellar region can cause the well-developed collateral circulation as in the so-called "moyamoya" disease of unknown etiology.

京都大学医学部脳神経外科学教室 石川正恒, 半田 肇, 森 淩明

滋賀医科大学脳神経外科学教室 松田 功

**Two Cases of Juvenile Polyp**

RYOKO TABATA, HARUO TAKEDA, ARIMICHI TAKABAYASHI and KIMIO HENMI

Department of Surgery, Kyoto Teishin Hospital, Shinmachi Rokukaku, Nakagyo-ku, Kyoto, Japan.

Arch Jap Chir 48 : 645~650, 1979.

Two patients with juvenile polyp, which has rarely been reported in Japan, were recently treated in this hospital. At first, the diagnosis was adenomatous polyp, but more careful observation showed that the histological findings differed from those of typical adenomatous polyp and the diagnosis was corrected to juvenile polyp. Histologically, juvenile polyps have a denuded surface, actively secreting cystic glands and abundant stroma infiltrated with leucocytes, especially eosinophiles. It is suspected that the existence of juvenile polyp is not well known, so it is usually misdiagnosed as adenomatous polyp in Japan.

京都遞信病院外科 田畠良宏, 武田温雄, 高林有道, 辺見公雄

**Transomental Lesser Sac Hernia**

YOH KASAHARA, SHIGERU TANAKA, SHUJI KAWAI, HIROKI MATSUMOTO, TAKAAKI SUDO, HIROYA UMEMURA, SEI SHIRABA and TAKESHI KUYAMA

The Second Department of Surgery, Kinki University School of Medicine, (Director : Prof. Dr. TAKESHI KUYAMA), Sayama, Osaka, Japan.

Arch Jap Chir 48 : 651~654, 1979.

A 24-year-old male was admitted on November 2, 1978 because of nausea, vomiting and upper abdominal pain. Barium enema and scout films of the abdomen suggested a large bowel obstruction. The patient underwent celiotomy 48 hours after the admission. A transomental lesser sac hernia containing 8 cm of the left transverse colon was noted. The incarcerated colon was made a reduction and the slit of greater omentum, 4 cm in its largest diameter, was closed with interrupted sutures. The incidence of omental hernia is low among the internal hernia. In Japan, this case is the second report of transomental lesser sac hernia containing the colon.

近畿大学医学部第2外科学教室 笠原 洋, 田中 茂, 川合秀治, 松本博城, 須藤峻章,  
梅原博也, 白羽 誠, 久山 健

## **Studies on Lysozyme in Articular Cartilage**

**SADAHITO MATSUMOTO**

Department of Orthopaedic Surgery, Faculty of Medicine, Kyoto University (Director : Prof. Dr. TAKAO YAMAMURO) Sakyo-ku, Kyoto, Japan.

Arch Jap Chir 48 : 657~666, 1979.

To investigate the localization of lysozyme in articular cartilage, a human knee joint was examined by immunocytochemical techniques with immunofluorescence method and horseradish peroxidase method. Alterations in activity of the enzymes in articular cartilage were studied of 40 Japanese white rabbits by immobilization of the knee in extension, intraarticular injection with croton oil or hydrocortisone acetate. Articular cartilage and synovial fluid were taken immediately after serial sacrifices. Lysozyme, cathepsin D,  $\beta$ -glucuronidase as well as acid and alkaline phosphatases were assayed. Specimens were also taken for histological and histochemical evaluations.

Intense lysozyme activity was demonstrated in the territorial region of the matrix. The activity of lysozyme was elevated in various joint disorders.

The studies revealed that lysozyme is distributed in the articular cartilage and it is extracellularly located. Alteration of its activity was shown to have a close relationship with degeneration of the articular cartilage.

京都大学医学部整形外科学教室 松本禎仁

## **Experimental Inducement of Saccular Cerebral Aneurysms in Rats**

**NOBUO HASHIMOTO**

Department of Neurosurgery, Kyoto University Medical School (Director: Prof. Dr. HAJIME HANDA)

Arch Jap Chir 48 : 667~690, 1979.

Saccular cerebral aneurysms were successfully induced in rats treated with ligation of one or both common carotid arteries, deoxycorticosterone and salt hypertension, and  $\beta$ -aminopropionitrile. Ligation of one or both carotid arteries with experimental hypertension was a minimal requirement for inducing the lesion. Aneurysms developed on the large arteries at the base of the brain, where hemodynamic stresses were apparently increased.  $\beta$ -aminopropionitrile increased the incidence of the lesion. Pathological findings were generally in accordance with those of saccular cerebral aneurysms in man.

## **Lysosome and Healing of Gastric Ulcer Developed by Acetic Acid in Rats**

**IPPEI YANAGI**

Department of Surgery (Gastroenterological Division), Wakayama Medical College. (Director : Prof. Dr. MASAHIRO KATSUMI) Wakayama, Japan.

Arch Jap Chir 48 : 679~691, 1979.

The lysosomal activities and acid mucopolysaccharide are investigated histochemically in the course of experimental gastric ulcer of rats. And either a lysosome stabilizer or a lysosome labilizer is administered to the rats on the healing process of the ulcer.

As a result, the both drugs affect collagen maturation in the granulation tissue of the ulcer base, and healing of the ulcer.

和歌山県立医科大学消化器外科教室 柳 一平

## **Role of Intestinal Flora on Metabolism of Intravenous Neutral Fat**

**TAKESHI KUYAMA**

The Second Department of Surgery, School of Medicine, Kinki University, Sayama, Osaka, Japan.

Arch Jap Chir 48 : 692~697, 1979.

The injurious effects of intravenous infusion of fat emulsion are caused by the contamination of bacteria. At the germfree environment, any injurious effects of venous administration of fat emulsion never occur, if doses of intravenous neutral fat is adequate. Male gnotobiotics can utilize the intravenous fat for caloric source, more effectively than female germfree animals, because the intestinal flora products the male sexual hormone, that is something like protein anabolic hormone, seemingly.

**Experimental Studies on Gallstone Formation after Partial Ileal Bypass Operation (I) Effects of Partial Ileal Bypass on Biliary Lipids in Dogs**

NOBUAKI KOBAYASHI

Second Department of Surgery, Faculty of Medicine, Kyoto University (Director Prof. Dr. YORINORI HIKASA) Sakyo-ku, Kyoto, Japan.

Arch Jap Chir 48 : 698~711, 1979.

In the view point of gallstone formation, effects of partial ileal bypass operation on biliary lipids were examined in dogs. Bile acid (BA) concentration decreased, and in molar ratio cholesterol (Ch) and phospholipids (PL) increased but BA decreased. Among bile acids the concentrations of cholic and deoxycholic acid decreased, but chenodeoxycholic acid increased relatively. Although BA + PL/Ch decreased after partial ileal bypass operation the bile composition remained in the micellar zone in the triangular coordinates and no gallstone was found in all operated dogs. Ch and PL secretion were linearly correlated with BA secretion and those per a mole of BA increased after partial ileal bypass operation.

京都大学医学部外科学教室第2講座 小林展章

**Efficacy of Fluorocarbon (Fluosol-DA) on brain in low hematocrit conditions. Part 1 : Study on severely hemodiluted dogs by exchange transfusion.**

SHIRO NAGASAWA, YOSHITO NARUO, YOSHIFUMI ODA, TAKAHO MURATA, HAJIME HANNA

Department of Neurosurgery, Kyoto University Medical School, Kyoto, Japan.

Arch Jap Chir 48 : 712~719, 1979.

The efficacy of Fluosol-DA, 20% and 35% (FDA-20, FDA-35) as an erythrocyte substitute was studied on severely hemodiluted dogs by exchange transfusion. FDA 20 group showed the highest survival rate of 100%, with the lowest incidence of electroencephalographic change (17%) and with the lowest incidence of ventricular dilatation in the long-surviving dogs compared with those of FDA-35 group and control group of Lactated Ringer's solution. Consequently, Fluosol-DA, 20%, was considered to be effective to prevent the brain from hypoxia in severely hemodiluted conditions.

**Clinical Application of a Fat Emulsion "Intralipos"**

HIROSHI TANIMURA, YORINORI HIKASA, MASAO NAGASE, NOBUAKI KOBAYASHI, MOTOICHI SETOYAMA, SUMIO MUKAIHARA, TOSHIO KAMATA, KEISUKE MARUYAMA, HITOSHI KATO, KIICHIRO MIKI and TSUKASA SEKIYA Second Department of Surgery, Faculty of Medicine, Kyoto University

KINYA HASHIMOTO and KIYOSHI OHSUMI Mitsubishi Kyoto Hospital

HARUO TAKEDA and RYOKO TABATA Kyoto Teishin Hospital

KAZUMASA INOUE and KUNIHIKO SHIRASU Takeda Hospital

TSUTOMU SHIMIZU and YASUO MURAYAMA Shimizu-Geka Hospital

NAOYA MASAKI and MASAYOSHI KAWANO Kyoto Hospital, Japan Tabaco & Salt Co.

Arch Jap Chir 48 : 720~727, 1979.

An intravenous fat emulsion "Intralipos", newly produced in Japan, were given to 17 patients with surgical diseases and it was observed that the fat emulsion can be used safely and effectively without any adverse effects.

京都大学医学部外科学教室第2講座 谷村 弘, 日笠頼則, 長瀬正夫, 小林展章, 濑戸山元一, 向原純雄, 薫田寿夫, 丸山啓介, 加藤仁司, 三木毅一郎, 関谷 司

三義京都病院外科 橋本欣也, 大隅喜代志 京都通信病院外科 武田温雄, 田畠良宏

武田病院外科 井上一正, 白石邦彦 シミズ外科病院 清水 勉, 村山保雄

日本厚生公社京都病院 正木直也, 河野正義