No. 4

ブラジル国カンピーナス大学消化器病診断・研究センター運営指導専門家チーム報告書 平成5年10月

ブラジル国カンピーナス大学
消化器病診断・研究センター
運営指導専門家チーム報告書

平成5年10月

国際協力事業団

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ブラジル国カンピーナス大学
消化器病診断・研究センター
運営指導専門家チーム報告書

平成５年10月

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序　文

ブラジル国政府は、サンパウロ州第五行政区（住民約400万人）の中央病院の役割を果たしているカンピーナス大学医学部に「消化器病診断センター」を設立し、同国においての出血性消化器疾患の診断・研究能力の向上を目標とした技術協力を我が国に要請越した。

これを受けて我が国は、当事業団より調査団を派遣し、平成２年７月に討議議事録（Ｒ／Ｄ）をブラジル国と署名・交換することにより、同月から５年間の予定でプロジェクト方式技術協力を開始した。

今般、４年目に入った技術協力の進捗状況をブラジル側を交えて確認し、今後の協力計画をより効果的に実施することを目的として、運営指導専門家チームを派遣した。

本報告書は、上記専門家チームが実施した調査及び協議の内容とその結果などを取りまとめたものである。ここに、本件調査にあたりご協力頂いた関係者に対して深甚なる謝意を表すとともに、今後とも本件技術協力の成功のために一層のご支援、ご協力をお願いする次第である。

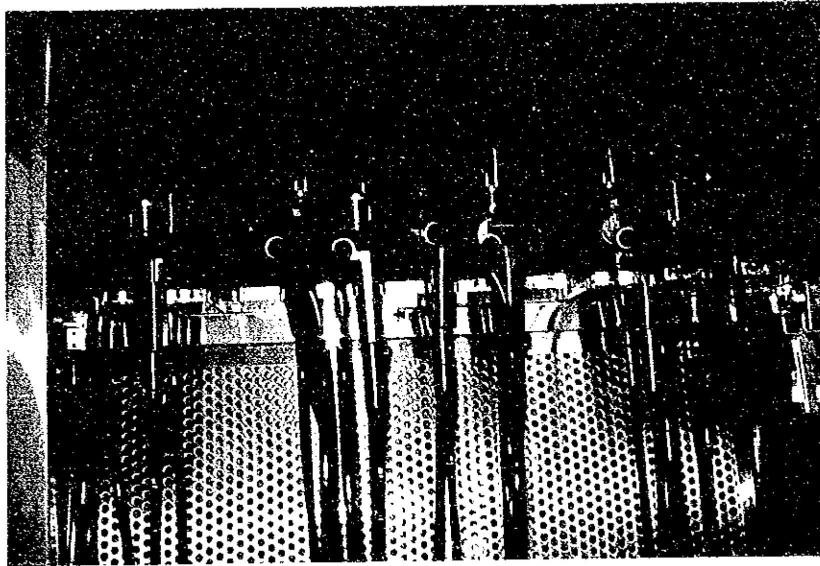
平成５年10月

国際協力事業団
医療協力部長
小早川　　隆敏

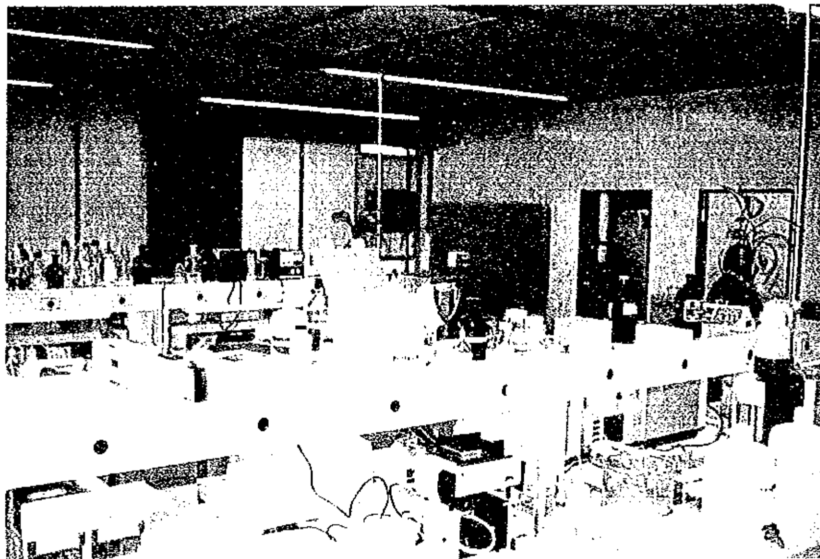
写　真

ミニッツ署名

第3回ブラジル一日本消化器病セミナー



供与機材（内視鏡）



病理研究室

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1.　運営指導専門家チーム派遣について

1－1　専門家チーム派遣の経緯と目的

ブラジルでは食道静脈瘤をはじめ出血性の消化器疾患が多発しているにもかかわらず、同疾患に対する診断・治療・予防法は十分確立された状況とはいえず、ブラジル政府はサンパウロ州第五行政区において中央病院的役割を果たしているカンピーナス大学病院内に「消化器病診断・研究センター」を建設し、出血性消化器疾患に対する種々の医療技術の移転に関する協力を我が国に要請越した。

これを受け、国際協力事業団は、臨床部門、診断部門、基礎研究の各部門において日本側から技術協力を実施することでブラジル側と合意に達し、平成2年7月から5年間を協力期間とした本プロジェクトを開始した。

現在4年目を迎え、これまでに長期派遣専門家7名、短期派遣専門家20名を派遣し、研修員11名を受け入れ、供与機材については平成5年度分を含めると総額3億1千万円の協力を行ってきている。

今後さらにプロジェクトにおける効果的な技術移転を実施し、初期の目標を達成するために以下の項目を指導科目として運営指導専門家チームを派遣した。

(1) 派遣中の専門家及びブラジル関係者との協議を通じて、TSI(暫定実施計画)に沿った各部門の技術移転の進捗状況について調査・確認を行う。

(2) 技術移転が円滑に実施されるよう、供与機材の使用状況、故障に対する部品の調達、管理について関係者と話し合う。

(3) 適切なカウンターパートの配置、十分な研究所の場所の確保等、ブラジル側が取るべき措置についてブラジル側と協議を行う。

(4) 今後の協力についてブラジル側の要望を調査する。

(5) セミナーを開催し、カウンターパートへの助言を行う。

1－2　専門家チーム派遣の構成

団長：藤　巻　雅　夫　(総括・外科学)
富山医科薬科大学　第二外科学教室　教授

団員：佐　藤　良　也　(寄生虫学)
琉球大学医学部　寄生虫学教室　教授

岩　政　輝　男　(病理学)
琉球大学医学部　病理学教室　教授

団員：榊　原　年　宏　（消化器外科）

野村病院

松　本　博　富　（技術協力）

国際協力事業団　医療協力部　医療協力第二課

ジュニア専門員

1－3　派遣日程

月　日	曜	内　　　容
9／20	月	22：00　成田空港発
9／21	火	09：00　サンパウロ空港着 12：00　専門家チーム打ち合わせ会議 14：15　JICA サンパウロ事務所表敬訪問
9／22	水	09：00　カンピーナス市へ移動 15：00　ガストロ・センター視察 19：00　セミナー・オープニング・セレモニー
9／23	木	08：45　セミナー開会式 09：00　掛川暉夫（久留米大学・教授）発表 10：00　藤巻雅夫（富山医科薬科大学・教授）発表 14：00　愛場信康（富山医科薬科大学・医員）発表 14：30　南部修二（富山医科薬科大学・助手）発表 16：00　渡辺明治（富山医科薬科大学・教授）発表 17：00　終了
9／24	金	10：00　梶原哲郎（東京女子医科大学・教授）発表 11：00　佐藤良也（琉球大学・教授）発表 11：30　小林　潤（琉球大学・助手）発表 11：45　当真　弘（琉球大学・助手）発表 07：30　藤巻、松本カンピーナス発 13：00　ブラジル大使館表敬訪問 15：00　JICA ブラジル事務所表敬訪問 21：30　カンピーナス帰着
9／25	土	資料整理
9／26	日	資料整理
9／27	月	09：30　ガストロ・センターにて打ち合わせ会議 14：00　各分野別運営指導
9／28	火	09：20　ガストロ・センターにて打ち合わせ会議 14：00　各分野別運営指導 20：00　団長主催カウンターパート意見交換会
9／29	水	09：00　ガストロ・センターにて打ち合わせ会議 12：00　ミニッツ署名 14：00　専門家チームサンパウロへ移動 19：00　JICA サンパウロ事務所長主催送別会
9／30	木	09：30　JICA サンパウロ事務所報告 11：00　藤巻団長サンパウロ領事館表敬・報告 23：55　専門家チーム、サンパウロ発
10／1	金	機中
10／2	土	13：30　成田空港着・解散

1－4　主要面談者

(1)　ブラジル側関係者

Carlos Vogt	（カンピーナス大学長）
Jose Martins Filho	（カンピーナス大学副学長）
Luis Alberto Magna	（カンピーナス大学医学部長）
Antonio Frederico N. Magalhaes	（プロジェクト・コーディネーター）
Jose Carlos Pareja	（プロジェクト・コーディネーター）
Ademar Yamanaka	（セクレタリー）

(2)　日本側関係者

サンパウロ領事館

中村　　裕	（領事）
中江　章　浩	（領事）

JICAサンパウロ事務所

寺内　光　夫	（所長）
斎藤　良　夫	
佐々木　弘　一	

2. 要約

2－1 技術協力計画の実施状況

(1) 専門家派遣実績

長期派遣専門家

年度	氏名	指導科目	派遣期間	所属先
90	三沢 巧	業務調整	90/10/31～92/10/30	
	島袋 哲	チームリーダー	90/11/09～93/11/08	
	松本 健	X線撮影	91/01/10～92/01/09	メディサン
	龍門 育子	臨床検査	91/03/25～92/03/24	
91	本多 安代	医療機器管理	91/06/28～92/10/30	
92	小林 潤	寄生虫学	92/05/18～94/05/17	琉球大学
93	上野 貞信	業務調整	93/05/31～95/05/30	日本国際協力センター

短期派遣専門家

91	田中 三千雄	消化器内科	91/04/06～91/04/27	富山医科薬科大学
	鈴木 修一郎	消化器外科	91/04/08～91/10/02	富山医科薬科大学
	小林 潤	寄生虫学	91/06/10～91/08/09	琉球大学
	斎藤 清二	消化器内科	91/09/21～91/12/21	富山医科薬科大学
	藤巻 雅夫	計画打ち合わせ	91/11/28～91/12/08	富山医科薬科大学
	山崎 高應	計画打ち合わせ	91/11/28～91/12/08	富山医科薬科大学
	加藤 敏雄	計画打ち合わせ	91/11/28～91/12/08	文部省
	鈴木 達男	計画打ち合わせ	91/11/28～91/12/08	国際協力事業団
	樋口 清博	消化器内科	91/12/13～92/03/20	富山医科薬科大学
92	坂本 隆	消化器外科	92/04/08～92/07/10	富山医科薬科大学
	若林 泰文	消化器内科	92/06/29～92/10/05	富山医科薬科大学
	長谷川 英男	寄生虫学	92/09/16～92/11/15	琉球大学
	勝山 新弥	消化器外科	92/09/23～92/12/27	富山医科薬科大学
	田沢 賢次	消化器外科	92/09/23～92/10/02	富山医科薬科大学
	山田 明	セミナー講師	92/11/30～92/12/13	富山医科薬科大学
	霜田 光義	セミナー講師	92/11/30～92/12/13	富山医科薬科大学
	土田 敏博	セミナー講師	92/11/30～92/12/13	あさひ総合病院
	舟木 淳	セミナー講師	92/11/30～92/12/13	富山医科薬科大学
	高原 照美	消化器内科	93/01/06～93/03/31	富山医科薬科大学
	深栖 一	X線	93/01/13～93/03/19	なし

年度	氏名	指導科目	派遣期間	所属先
93	竹森　　繁	消化器外科	93/04/12～93/07/16	富山医科薬科大学
	当真　　弘	寄生虫学	93/04/19～93/10/02	琉球大学
	南部修二	消化器内科	93/07/12～93/10/09	富山医科薬科大学
	渡辺明治	セミナー講師	93/09/20～93/09/27	富山医科薬科大学
	愛場信康	セミナー講師	93/09/20～93/09/27	富山医科薬科大学
	掛川暉夫	セミナー講師	93/09/20～93/10/02	久留米大学
	梶原哲郎	セミナー講師	93/09/20～93/10/02	東京女子医科大学
	藤巻雅夫	運営指導	93/09/20～93/10/02	富山医科薬科大学
	榊原年宏	運営指導	93/09/20～93/10/02	野村病院
	佐藤良也	運営指導	93/09/20～93/10/02	琉球大学
	岩政輝男	運営指導	93/09/20～93/10/02	琉球大学
	松本博富	運営指導	93/09/20～93/10/02	国際協力事業団
	清水哲朗	消化器外科	93/10/13～93/12/22	荻野病院
	山田　　明	チームリーダー	93/10/28～94/03/31	荻野病院
	倉茂洋一	臨床検査	93/11/10～93/12/22	富山医科薬科大学
	宮林千春	消化器内科	94/01/10～94/03/09	富山医科薬科大学

(2) カウンターパート研修員受け入れ実績

年度	氏名	研修科目	研修期間	所属先
90	デオ・パウロ・トセッティ	放射線学	90/05/08～90/11/08	富山医科薬科大学
91	ネルソン・ブランダリーゼ	消化器外科	91/08/22～91/09/18	富山医科薬科大学
	シロ・モンテス	消化器内科	92/02/27～92/09/05	富山医科薬科大学
	リカルド・ナバロ	消化器外科	92/03/24～92/05/18	富山医科薬科大学
92	カルロス・バレジャ	消化器外科	92/09/01～92/09/23	富山医科薬科大学
	ロベルト・ロペス	消化器外科	93/02/23～93/05/01	富山医科薬科大学
	シルビア・シマ	消化器内科	93/02/23～93/07/03	富山医科薬科大学
93	ナタリシア・ハラ	寄生虫学	93/07/20～93/10/24	琉球大学
	マリア・デ・ファティマ	小児消化器内科	93/07/27～93/10/31	富山医科薬科大学
	カルロス・ヴォグト	医療事情	93/10/10～93/10/20	富山医科薬科大学
	イレーネ・カマタ	X線	94/01/10～94/03/27	富山医科薬科大学

(3) 機材供与実績

年度	主要供与機材	金額	累計額
89	遠隔式ＲＦＴシステム 十二指腸ファイバースコープ 大腸ファイバースコープ 高周波焼付電源装置 ビデオエンドスコピー 検診台 リニア電子走査超音波診断装置 パーソナルコンピューター Ｘ線自動現像機	97,304,100	97,304,100
90	上部消化器管汎用ビデオスコープ 十二指腸ビデオスコープ 大腸ビデオスコープ ビデオシステムセンター ポータブル超音波診断装置 小型冷却遠心機 超低温フリーザー 真空凍結乾燥機 ＳＤＳ－ＰＡＧＥシステム	68,084,922	165,389,022
91	十二指腸ファイバースコープ 上部消化器ファイバースコープ 大腸ファイバースコープ モニター用自動撮影装置 Ｓ－ＶＨＳビデオカセットレコーダー 落射蛍光顕微鏡装置 顕微鏡カラーテレビ 超音波診断装置 クリーンベンチ安全キャビネット	56,552,856	221,941,878
92	上部消化器管内視鏡用処置セット 十二指腸ファイバースコープ 十二指腸内視鏡用処置セット 大腸ファイバースコープ 大腸内視鏡用処置セット ビデオエンドスコピー 検診台 リニア電子走査超音波診断装置 小型冷却遠心機 紫外可視分光解析システム	62,841,221	284,783,099
93	臓器写真撮影セット 炭酸ガス培養器 生物顕微鏡 限外ろ過フィルターシステム アミノチェックメーター 医療情報管理コンピューターシステム ビデオラパロスコープ 超音波内視鏡 ＨＩＶ検査試薬	未定	未定

2－2　要約

本専門家チームは、平成5年9月22日より9月29日までの間で、ブラジル側関係者同席のもと、これまでの活動実績の確認並びに来年度の活動計画を中心とした今後のプロジェクトの運営管理について協議を行った。

(1)　全体的な進捗状況

本プロジェクトでの治療・診断における技術移転はほぼ達成され、着実に成果を挙げてきている。これらの技術は、例えば診療活動において統一的な保険システムを通じて地域内の住民に無料診断を行うなど域内の医療に多大な貢献を及ぼしている。

しかし、研究分野においては、組織としての帰属意識が薄い上にカウンターパートによっては、センターでの勤務時間が大学側の雇用関係上短く限られており、プロジェクトの一貫した研究テーマの設定が困難な状況にある。研究分野の強化は今後の重点項目として、両国側の共通した意見であり、コンピューターによるX線、超音波及び内視鏡診断画像の保存システム、並びに写真撮影技術の関連機材の搬入が本邦において現在手続き中である。

(2)　ブラジル側投入計画の進捗状況

以前より懸案事項となっていたカウンターパートの配置について、寄生虫学部門での検査技師（臨床検査と寄生虫検査）の採用及び臨床医学部門での本邦研修経験者の正規採用について、組織への技術移転、固定を促す見地から改善を求めていたところ、大学側の定員削減の状況の中にあって寄生虫学での2名のカウンターパートが配置された。本邦研修員の選抜に関してはブラジル側主導に日本人専門家が助言・合意する方法がとられており、ブラジル側の持続発展のためにスタッフの増員に努めたい、との抱負を裏付ける努力の現われと思える。

また、ローカルコストの問題についてブラジル側はセンターの活動を継続するのに十分な運営管理予算が確保されていると言うものの、試薬をはじめとする消耗品類を日本側からの供与に頼る部分も見受けられる。さらに、現在までに供与した機材の中にはスペアパーツを必要とする機材が幾つかあり、今後、両国共同で消耗品の自己調達方法を検討していくことが課題となっている。

(3)　日本側投入計画の進捗状況

現在までのところ、日本側の投入についてはＴＳＩに沿って順調に進んでいる。カウンターパート研修員の受け入れでは現在まで11名を受け入れ、帰国後には外科の症例検討会や内視鏡の読影会を開催し、この会議の席で本邦研修の成果を紹介していることなどから各分野での研修が技術移転の面からでも大きな成果を挙げてきていると言えよう。

機材供与について、平成4年度までに供与した機材は保守管理も行き届き有効に活用

されていることが確認された。また、今後の重点項目として挙げられた医療情報システム構築のためのコンピューター及び医療写真撮影機材は本年度に搬入が計画されている。

3. 部門別進捗状況

3－1 消化器外科

今回のTSIに沿った消化器外科部門の技術移転の進捗状況についての調査、確認は概ね順調に進行しているものと考えられる。各項目についての状況は下記のとおりである。

(1) 第3回ブラジル－日本消化器病セミナー

カンピーナス大学側より肝移植と慢性膵炎における外科的治療の発表があったが、その内容からもカンピーナス大学での技術移転が順調に進んでおり、レベルが十分高いことが証明された。その他、胃癌や大腸癌など日本では一般的と見なされている消化器癌に関する発表がなかったが、これは前回の派遣専門家から指摘されているように、系統的リンパ節廓清の方法や意識が充分でないことによるものと考えられる。

胃癌については、Dr. Brandaliseらによってリンパ節廓清が積極的に行われているようであるが、平成5年6月に改訂された日本の胃癌取扱規約の抜粋をポルトガル語に翻訳したものを活用するように指導してはと考える。本書は今後の臨床データの蓄積などに有意義であり、今後、消化器外科の分野において系統的手術術式が採用され、UNICAMPにおける消化器癌の臨床病理学的特徴についての研究がなされることに期待したい。

(2) 内視鏡的治療

既にカウンターパート医師により内視鏡的止血法、食道静脈瘤硬化療法、乳頭切開術などのハイレベルな治療が施されており、レシデントや若手内視鏡医に対しても積極的に指導が行われている。内視鏡的止血法については、純エタノール局注法が採用されているようであるが、今後は症状に応じてHSE（Hypertonic Saline-Epinephrine）液による局注法についても指導していきたいと考える。当地に多く見られる逆流性食道炎やシャーガス病による食道狭窄についても、主にEder-Puestow型の食道ブジーを用いた拡張術が行われているようであるが、日本でより一般的に使用されているセレスチンダイレーターの導入を計画している。

また、手術不可能な食道癌の狭窄改善を目的とした手術的食道挿管術も既に実施されているが、富山医科薬科大学第二外科で行われているより簡単な人工食道ブジー挿管術についてもデモンストレーションと治療成績を加えたポルトガル語版マニュアルを作成し、その簡便性、有用性について理解を深めてもらいたい。但し、このキットはまだまだ高価であることから、今後導入については当面日本側からの供与が必要と思われる。

(3) 臨床研究

当センターで検証される疾患の多様性や症例数の多さを考えれば、臨床研究の材料に

は不自由しないと考えられ、今後診療に係る業務以外での研究に対しての積極的な対応が強く望まれる。

3－2　消化器内科

(1)　診断

TSIに基づき、内視鏡診断・治療、腹部超音波診断、超音波ガイド下肝生検及び経皮的エタノール局注療法は順調に技術移転され、概ね満足されるべきレベルにある。しかし、超音波内視鏡、Interventional Radiologyについては十分指導されておらず、今後の課題である。

臨床面の問題点としては、昨年も指摘があったように内視鏡所見記入時のスケッチのないことや内視鏡写真の記録及び保存の不徹底が挙げられる。これはブラジル側医師の努力により改善されてきているものの十分とは言えない。また、病理標本作成上の問題により、病理組織と内視鏡所見の対比ができないという点は未だ改善されていない。

写真の保存・管理については、平成6年度に医療写真技術の専門家の派遣が、また病理標本作成については本年度11月に病理専門家が派遣されることになっており改善が期待される。

(2)　研究

本センターにおいては前述の如く、一部を除いて技術移転はほぼ達成されており、診療面については高いレベルにある。しかし、研究面ではブラジルにおける社会的要因などにより、十分に行われているとは言えない。その主な要因としては、

(ア)　臨床データの蓄積と管理が十分に行われていない。

(イ)　日本及び欧米各国で日常的に行われている検査が行われていない。

(ウ)　各セクションの連携がうまくとれていない。

などの問題点が挙げられる。(ア)については、本年度にコンピューター医療情報管理システムの導入が決定しており、今後の改善が期待される。(イ)については予算面での配慮が必要であり、(ウ)についてはブラジル側の問題であるが、各研究のテーマ、結果などについても全セクションの関係者がディスカッションを定期的に行うことにより、連絡が密になり、さらには研究レベルの向上に繋がるものと思われる。

(3)　まとめ

診療面では、一部を除いて高いレベルの診療活動が行われている一方で、依然として研究面での立ち遅れが指摘される。今後のプロジェクトの課題としては、研究面でのレベル向上が挙げられる。

3－3　臨床寄生虫

(1)　臨床血清検査

センターにおける臨床血清検査はその後も順調に実施されており、センター収入の大きな部分を占めている。しかし、検査試薬類購入の費用が検査料としての収入を上回るという逆ザヤ状態が続いており、本プロジェクト終了に向けて何らかの手だてを講じる必要が話し合われた。ブラジル側としては、現状で日本側からのプロジェクト援助がなくなれば今後とも、このような臨床検査をルーチンに続けることは困難であるという立場を崩しておらず、その対策のために下記の点について話し合った。

(ア)　本センターでのエイズなどの危険な感染症の実態とこれらの感染症にさらされる危険性の評価を行うこと

かかる臨床検査を本プロジェクトに取り入れた当初の目的は、危険な感染症に対する十分な情報のないままに医師らが内視鏡検査などで感染の危険にさらされるのを防止することにあったが、ブラジル側ではこの問題を使用器具の徹底消毒、各々の医師がマスク、手袋を着用することで防護できると考えており、当検査の必要性には最初から消極的であった経緯がある。従って上記のような立場からこれまでの検査成績をまとめ、本センターでの感染症の実態と感染の危険性に関して評価を行い、その実態に則した現実的な対応を如何にするべきか、を来年度に向けて検討するべきであることを提案した。

(イ)　今後の臨床研究における臨床検査の必要性に関する検討を行うこと

ブラジル側は各種の臨床研究を定着させ、本センターを発展させたい意向である。かかる臨床研究にとって臨床検査成績は不可欠な部分があり、現在の臨床検査の在り方を見直す必要があることを提言した。この点についてはブラジル側も理解しているが、現実にどのような臨床検査が必要になるかといった点になるとまだはっきりとした展望が示されていない。これは今後どのような臨床研究が本センターで実施されるかに依るところでもあるが、当面、現センター長のもとで実施される肝臓移植に関連して肝機能に関する高度な臨床検査の必要性が求められている。

(2)　寄生虫

(ア)　マンソン住血吸虫

本プロジェクトのために我々が開発したゼラチン凝集反応をセンターでのルーチンな住血吸虫症血清検査法として導入した。しかし、本症はガストロセンターでは比較的稀な疾患であり、本プロジェクト開始後、これまでに数例程度しか情報が得られていない。従って、サンパウロ大学の研究チームとの共同研究を通して本法の評価を行い、その結果を現地の雑誌に投稿した。また、本症の流行地であるアラゴ

アス州マセイオ大学と協力し、住民の感染状況調査も行い、本法をスクリーニング法として応用することを試みた。この調査研究は超音波検査による肝病変の検討を含めた臨床的立場からの調査とも併せて現在も進めている。

センターで問題となる食道静脈瘤と住血吸虫感染との関連性の検討は、これまでに30例近い患者の検査を実施したが、その中で感染に疑いを持つ抗体陽性者はわずか2名であった。今後さらに多くの患者について検討を重ねて、食道病変と住血吸虫との関連について結果をまとめる予定である。

以上の研究は平成2年5月より長期派遣されている小林専門家によって精力的に進められ、結果については平成4年度のセミナーで発表された。小林専門家は引き続き残された派遣期間にこれら結果の取りまとめ、論文発表に当たる予定である。

(イ) シャーガス病

シャーガス病の血清診断法は、同じくゼラチン凝集反応による新しい検査法を導入することによって本年度から実施された。このために当真専門家が短期派遣され、大学のシャーガス病臨床研究チームと協力して本検査法の診断評価に当たった。結果は満足するべきものであり、現在論文としてまとめる段階に入っており、この結果は現地セミナーにおいて発表された。

本検査法は山形大学によるパラグアイでのシャーガス病研究プロジェクトとの協力によるものであり、同様の検討はパラグアイでも実施され、その結果も論文として現在校正中である。

(ウ) 一般消化器寄生虫病

ガストロセンターにおいて受診する患者の検便はセンター内の別のグループが分泌、代謝関係の検査目的で実施しており、残念ながら本プロジェクトチームに検便の機会が与えられていない。このため、同患者の消化管内寄生虫感染の事態は明らかではない。そこでカンピーナス周辺の農場において住民の寄生虫感染状況の調査を行った。その結果、住民の70%が何らかの消化管内寄生虫を保有していることが明らかになり、受診者の間でもかなりの割合で感染者が見られるものと予想された。カンピーナス周辺でのかかる寄生虫感染状況調査はこれまで実施されておらず、現地の専門誌に投稿中である。

(3) 現状及び問題点

以上、寄生虫病関連の計画は比較的順調に進んでおり、その成果はプロジェクトの成果として既に専門誌にいくつか投稿済みである。本研究計画に対するブラジル側の協力体制は概ね良好であると聞いているが、反面、現地スタッフの寄生虫病研究に対する関心は依然として低く、積極的にこれらの問題に取り組もうとする姿勢はまだまだ見られ

ていない。

ブラジル側サイエンティフィック・コーディネーターのフレデリコ教授によれば、センターにおける研究のテーマとして多数のものが挙げられている。それらの中には興味のあるものも多く含まれてはいるが、それらの研究は研究会などでの簡単な症例発表などのレベルに止まっており、さらに踏み込んで必要なデータをあげ、完成された論文としてまとめる意欲が薄いことが感じられる。

原因としては、研究システムの違いや医師の職務の問題などがあるものの、いずれにしても何等かの研究テーマを定着させ、その中でのラボラトリーをどのように位置付けるかが重要になってくる。この問題に対するブラジル側の関心も高く、今後日本側からの何らかのテコ入れが望まれる。

ラボラトリーでのマンソン住血吸虫症の研究は、食道静脈瘤との関係で取り上げられた問題であるが、実際のところセンターで受診する患者の間でのマンソン住血吸虫感染率は低く、食道静脈瘤の所見を示す患者の間でも高い感染率を示唆する結果は得られていない。従って本センターにおいてマンソン住血吸虫症の検査をルーチンに実施する必要があるかどうかは目下微妙な点である。

他方、シャーガス病は現在でもカンピーナス大学内で比較的多数の患者が見い出され、その血清診断法にはブラジル側の関心も高く、日本でこれをキット化する試みも始められつつある現状などから、今後は野外調査などを通して本法の診断的価値をさらに評価することが大切である。

3－4　病理検査

(1)　人員と能力

室長の Dr. Miriam Trevisan の他1名の若手病理医、さらに2名のレシデントの計4名と技師2名で構成されている。病理標本診断はかなりの高いレベルが要求されることもあり、主に Dr. Miriam Trevisan が診断を行っている。Dr. Miriam Trevisan と顕微鏡を用い、個々の症例について標本を検討したが、診断能力、病理知識のレベルは日本の講師ないしは助教授級のレベルがあると考えられたいへん有能である。さらに問題点を抽出し、検討する能力についても十分であると考えられる。また、肺癌と食道癌について小セミナーを行ったが理解度も十分であった。

(2)　設備

光学顕微鏡、ミクロトーム、凍結切片作製用ミクロトーム、冷蔵庫、フリーザー等を有している。この他にも検査室においては、細胞培養用の炭酸ガス培養器、電気泳動装置などがあるが、病理部門の部屋としては、日本の大学と比較してもさほど大きくもな

い。現在の設備、活動内容から考察してさらに電顕用ミクロトーム、PCR 装置などが必要となる他病理室は同じ広さのものがあと２、３室必要である。また、試薬類の予算が少なく、抗体等が十分確保できていない。

(3) 今後の改善

病理医をさらに２、３名増員する必要があり、設備についても機材を充実させるとともに病理室を広げる必要がある。病理診断については日本や欧米諸国で行われている診断基準（WHO 等の基準）に沿って実施されているが、病理診断と臨床対応との間にやや問題が見られ、臨床と病理の意思の疎通を図るためにも合同検討会を開催するべきである。また、予算の問題もあるが、試薬類の供給に何らかの改善方法を模索する必要がある。

4. 合同委員会の協議事項

(1) 専門家派遣

現在のチームリーダーの任期が平成5年11月8日で満了となることから次期リーダーの派遣時期等について質問が寄せられた。これに対して今回の運営指導専門家チームの団長である藤巻教授から平成6年度前半にリーダーを派遣し、それまでの間は消化器外科の専門家をリーダー代行として派遣する旨提案され、ブラジル側はこれを了承した。

寄生虫分野で現在派遣中の小林専門家の任期が平成6年5月で終了するところ、琉球大学関係者及び同専門家より任期を10月まで延長し、次年度開催予定のセミナーでの成果発表をもって、寄生虫分野でのまとめとする意向が述べられた。

現在までに派遣された専門家について、専門分野での技術は高度でありながら、語学力によるプレゼンテーション能力に問題があることから、今後の専門家派遣計画に合わせて通訳の雇用を日本側で対応して欲しいとの要望がブラジル側より寄せられ、本部に持ち帰り検討することで合意に達した。

(2) カウンターパート研修

合同委員会の席上、ブラジル側から平成6年度について4名の候補者の受け入れが打診されたが、今年度と同様3名の予定であるところを説明し、優先順位を付け3名に絞り込むこととなった。受け入れ希望時期としては、別途各人と調整後受け入れ機関と協議することとなった。

本年10月に本邦研修予定のカンピーナス大学長、カルロス・ヴォグト氏の研修日程について本人と面談、日程の調整を行った。

(3) 機材供与

専門家の携行機材も含め機材の引き取りについては政府間の「日伯技術協定」による無税引き取りとカンピーナス大学輸入部の特権の「学術機材輸入無税通関」の2通りがある。大学輸入部からは、カンピーナス大学関連機材について大学特権による引き取りの希望が出されているものの、ブラジル事務所及びブラジル関係省庁とも十分協議して今後の方針を決定し担当課まで連絡するようプロジェクトチームへ伝えた。

平成5年度供与機材の中の現地調達分について至急申請書を提出するようプロジェクトチームへ伝えた。

機材の活用状況は現在までに供与した中では特に大きな修理を要するものはなく、また大学内の機材保守部での修理が可能であることから概ね順調に活用されていることが認められた。

(4) その他

平成6年度に予定されている評価調査団の渡航時期に合わせて、中南米（チリ、ドミニカ共和国、ボリビア）で現在実施しているJICAプロジェクトの合同セミナーをカンピーナスで開催したいというブラジル側の意向が述べられた。このセミナーに関しては以前から希望していることであり前向きに検討して欲しいとの要望であったが、本件のみでなく、他のプロジェクトも深く関与し、さらに予算上の問題もあることから本部へ持ち帰り検討することで了解を得た。

別 添 資 料

資料１　ミニッツ

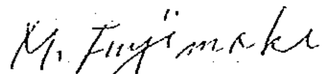
THE MINUTES OF DISCUSSIONS BETWEEN THE JAPANESE ADVISORY SURVEY TEAM AND THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE FEDERATIVE REPUBLIC OF BRAZIL ON THE JAPANESE TECHNICAL COOPERATION FOR THE PROJECT ON GASTROENTEROLOGICAL DIAGNOSIS AND RESEARCH CENTER OF THE STATE UNIVERSITY OF CAMPINAS

The Japanese Advisory Survey Team (hereinafter referred to as "the Team") organized by Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Prof. Dr. MASAO FUJIMAKI, Toyama Medical and Pharmaceutical University, visited the Federative Republic of Brazil from 21st to 30th September, 1993 for the purpose of reviewing the activities concerning the details of the Japanese Technical Cooperation for the Project on the Gastroenterological Diagnosis and Research Center of the State University of Campinas (hereinafter referred to as "the Project").

During its stay in the Federative Republic of Brazil, the Team observed the overall progress, exchanged views and had a series of discussions with the Brazilian authorities concerned.

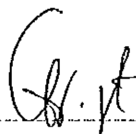
As a result of the discussions, the Team and the Brazilian authorities concerned agreed upon the matters referred to in the document attached hereto.

Campinas, 29th September, 1993.



Prof.Dr. Masao Fujimaki
Head,
Advisory Survey Team,
Japan International
Cooperation Agency

Prof.Dr.Luiz Sergio Leonardi
Executive Director
of the Gastrocenter,
The State University of
Campinas
The Federative Republic of
Brazil



Prof.Dr. Carlos A. Vogt
Rector
of The State University of
Campinas
The Federative Republic of
Brazil

I. GENERAL REVIEW

The Project has started on July 6, 1990, for five-years for the purpose of strengthening the capabilities of the diagnosis, treatment and research work for esophageal varices, gastrointestinal cancer and other digestive diseases in the field of gastroenterology, and thus contributing to the promotion of the public health in the Federative Republic of Brazil.

In order to achieve the purpose set above, Japanese Technical Cooperation will be expected to initiate in the fields of 1) clinics, 2) paramedical. 3) research, 4) education, in accordance with the Master Plan attached in the Record of Discussions signed on July 6, 1990.

Both sides reviewed the activities of the achievement made so far with regard to the implementation of the project. And agreed that the project is going well, as planned before. The Brazilian side is requesting an extention of the Project, and making efforts to consolidate this extention, starting to build a new building attached to the Gastrocenter.

In remaining years, we will plan to concentrate the activities in research areas, analysing the data, using computer system associated to the imaging photograph of the examinations performed at the Gastrocenter. And we would like to improve a closer association between Immuno-Parasitology and Pathology laboratories and Gastroenterology.

M.F.

II. ACHIEVEMENT OF TENTATIVE SCHEDULE OF IMPLEMENTATION

The technical cooperation activites under the Project which have been carried out from FY 1989 to FY 1993 are presented in ANNEX I, and II.

III. TENTATIVE SCHEDULE OF IMPLEMENTATION

According to the present state of progress and other conditions of the Project, both sides decided jointly formulated workable Annual Implementation Plan of the Project.

The outline of the Annual Implementation Plan for FY 1994 is as follows:.

1. Dispatch of Japanese experts to the Project (FY 1994)

a. Long-term experts
   1) Chief Adviser

b. Short-term experts
   1) Surgery (2 persons)
   2) Gastroenterology (2 persons)
   3) Parasitology (1 person)
   4) Pathology (1 person)
   5) Photography (1 person)

   Some other experts will be dispatched as necessary.

c. Short term Seminar
   1) Surgery
   2) Gastroenterology

   Some other experts will be dispatched as necessary.

2. Training of Brazilian counterparts in Japan (FY 1994)

The team explained that the possible number of counterpart personnel to be trained in FY 1994 would be three (3), and the Project

requested strongly to the team to increase one (1) more counterpart, because of the Project's wide range cooperation activities.

3. Provision of the Equipment

Equipment necessary for the Project will be provided within the limit of budgetary allocation of the Japanese side.

IV. OTHER

The project proposed to hold the Gastroenterology Seminar of Latin American JICA's Projects, for the purpose to present results of the project activities and exchange technical skill.

ANNEX I

LIST OF JAPANESE EXPERTS DISPATCHED BY JICA

LEADER

1. Dr. Tetsu Shimabukuro	90.11.09 - 93.11.08	(long term)

LIAISON OFFICER

2. Mr. Takumi Misawa	90.10.31 - 92.10.30	(long term)
3. Mr. Sadanobu Ueno	93.05.31 - 95.05.30	(long term)

X-RAY

4. Mr. Ken Matsumoto	91.01.10 - 92.01.09	(long term)
5. Mr. Hajime Fukasu	93.01.13 - 93.03.19	(short term)

PATHOLOGY

6. Mrs. Ikuko Ryumon	91.03.25 - 92.03.24	(long term)
7. Dr. Teruo Iwamasa	93.09.20 - 93.10.02	(short term)

SURGERY

8. Dr. Syuichiro Suzuki	91.04.08 - 91.10.02	(short term)
9. Dr. Masao Fujimaki	91.11.29 - 91.12.08	(short term)
10. Dr. Takashi Sakamoto	92.04.08 - 92.07.10	(short term)
11. Dr. Shinya Katsuyama	92.09.23 - 92.12.27	(short term)
12. Dr. Kenji Tazawa	92.09.23 - 92.10.02	(short term)
13. Dr. Akira Yamada	92.11.30 - 92.12.13	(short term)
14. Dr. Mitsuyoshi Shimoda	92.11.30 - 92.12.13	(short term)
15. Dr. Shigeru Takemori	93.04.12 - 93.07.16	(short term)
16. Dr. Masao Fujimaki	93.09.20 - 93.10.02	(short term)
17. Dr. Toshihiro Sakakibara	93.09.20 - 93.10.02	(short term)
16. Dr. Masao Fujimaki	93.09.20 - 93.10.02	(short term)
18. Dr. Teruo Kakegawa	93.09.20 - 93.10.02	(short term)
19. Dr. Tetsuro Kajiwara	93.09.20 - 93.10.02	(short term)

GASTROENTEROLOGY

20. Dr. Michio Tanaka	91.04.08 - 91.04.27	(short term)
21. Dr. Seiji Saito	91.09.21 - 91.12.21	(short term)
22. Dr. Kiyohiro Higuchi	91.12.13 - 92.03.20	(short term)
23. Dr. Terumi Takahara	91.11.28 - 91.12.08	(short term)
24. Dr. Hiroyasu Wakabayashi	92.06.29 - 92.10.05	(short term)
25. Dr. Toshihiro Tsuchida	92.11.30 - 92.12.13	(short term)
26. Dr. Jun Funaki	92.11.30 - 92.12.13	(short term)
27. Dr. Terumi Takahara	93.01.06 - 93.03.31	(short term)

28. Dr. Shuji Nambu	93.07.12 - 93.10.09	(short term)
29. Dr. Akiharu Watanabe	93.09.20 - 93.09.27	(short term)
30. Dr. Nobuyasu Aiba	93.09.20 - 93.09.27	(short term)

MEDICAL EDUCATION

31. Dr. Takao Yamazaki	91.11.28 - 91.12.08	(short term)

TECHNICAL COOPERATION

32. Dr. Toshio Kato	91.11.28 - 91.12.08	(short term)

PARASITOLOGY

33. Dr. Jun Kobayashi	91.06.10 - 91.08.09	(short term)
34. Dr. Jun Kobayashi	92.05.18 - 93.05.17	(long term)
35. Dr. Hideo Hasegawa	92.09.16 - 92.11.15	(short term)
36. Dr. Hiromu Toma	93.04.19 - 93.10.02	(short term)

SYSTEM ENGINEER

37. Ms. Yasuyo Honda	91.06.28 - 92.09.27	(long term)

COORDINATION

38. Mr. Hirohisa Matsumoto	93.09.20 - 93.10.02	(short term)

M.T.

LIST OF BRAZILIAN COUNTERPART PERSONNEL SENT TO JAPAN

GASTROENTEROLOGY

1. Dr. Ciro Garcia Montes	92.02.27 - 92.09.05
2. Dr. Silvia Maria M. Taba Shiwa	93.02.23 - 93.07.03
3. Dr. Maria de Fátima C.P. Servidoni	93.07.27 - 93.10.31

SURGERY

4. Prof.Dr. Nelson Ary Brandalise	91.08.22 - 91.09.18
5. Prof.Dr. Juvenal Ricardo N. Góes	92.03.24 - 92.05.18
6. Prof.Dr. José Carlos Pareja	92.09.01 - 92.09.23
7. Prof.Dr. Luiz Roberto Lopes	93.02.23 - 93.05.01

PARASITOLOGY

8. Dr. Natalicia Hifumi Hara	93.07.20 - 93.10.24

ANNEX II

PROVISION OF MACHINERY AND EQUIPMENT

Machinery, equipment and other materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project have been provided from 1990 to up-to-date.

1990

1) Fiberduodenoscope with accessories (1)
2) Fibercolonoscope with accessories (1)
3) Sigmoidoscope with accessories (1)
4) Choledochoscope with accessories (1)
5) Laparoscope with accessories (1)
6) Video endoscope with accessories (1)
7) X-Ray Television system with accessories (1)
8) Accessories of film developer (1)
9) Vacuum suction device with accessories (3)
10) Cabinet (10)
11) Projector (1)
12) Screen (1)
13) Sphignomanometer (2)
14) Enzyme immuno assay system (1)
15) Immunoblot system (1)
16) Ultrasonic pipet washer (1)
17) Balance. Top pan (1)
18) Ultra deep freezer (1)
19) High speed centrifuge (1)
20) Refrigerated centrifuge (1)
21) Spectro photometer (1)
22) Incubator (1)
23) Water distilling apparatus (2)
24) Refrigerator (1)
25) Deep freezer (1)
26) Shaker (1)
27) Lyophilizer (1)
28) Dry heat sterilizer (1)
29) High speed homogenizer (1)
30) Multi micro filter (1)
31) Liquid nitrogen tank (1)
32) Ultrasonic pipet washer (1)
33) Pump (1)
34) Magnetic stirrer (1)
35) Thermo mixer (1)
36) PH meter (1)
37) Pipets (30)
38) Multi channel pipets (8)
39) Diluter (1)
40) Tray mixer (1)
41) Plate washer (1)
42) Autoclave (1)
43) Ice manufacture equipment (1)
44) Decicate (1)

45) Chemocal and medicine for one year (1)
46) Instruments (Glass equipment) for one year (1)
47) Instruments (Non glass ware) for one year (1)

1991

Pathology related

1) Rotary Microtomo (1)
2) Slide warmer (1)
3) Microtome Knife Sharpner (1)
4) Automatic Tissue Processor (1)
5) Fluorescence Microscope (1)
6) Freezing Microtome (1)
7) Clean Bench (1)
8) Color TV System for Microscope (1)
9) Balance Electronic (1)
10) Tissue Embedding Consul (1)
11) System Microscope (1)

Ultrasonic scanner related

12) Ultrasonic scanner (1)
13) Treatment Set for Esophageal Varices (1)
14) Percutaneous Trans Hepatic Set (1)
15) Biliary Tract Drainage Set (1)

Endoscopic Diagnosis and Treatment related

16) Videoimage Endoscope Optional Item (1)
17) Fiberscope for Alimentary Canal (1)
18) Treatment Set for Alimentary Canal Endoscope (1)
19) Treatment Set for Duodenal Endoscope (1)
20) Colonofiberscope (1)
21) Treatment Set for Large Intestinal Endoscope (1)
22) Film for Endoscope (3.000)
23) Ionization Survey Meter (1)
24) TV Test Chart (1)
25) X-Ray Cassette with Screen 24x30cm (5) 35x35cm (5) 35x43cm (3)
26) Hanger for Protective Apron (6)
27) X-Ray Grid 24x30 (1) 35x35cm (1) 35x43cm (1)
28) Rack for X-Ray Grid (1)
29) Film Marker Set (2)

1992

1) Videoimage Endoscope System (1)
2) Fiberscope for upper Gastrointestinal tract GIF-2T20 (1)
3) Fiberscope for upper Gastrointestinal tract GIF-Q20 (1)
4) Duodeno-fiberscope (1)
5) Colono-fiberscope (1)

6) Treatment Set for Colono-fiberscope (1)
7) Treatment Set for upper Gastrointestinal tract (1)
8) Treatment Set for Duodeno-fiberscope (1)
9) Ultrasonic Scanner (1)
10) Tissue Embedding Center (1)
11) Auto Smear (1)
12) Dual-Viewing Microscope (1)
13) Water Bath (1)
14) Specimen Box (2)
15) Sero Diagnostic Reagent HBs-AG/Anti-HIV/Anti-HBC/HBe-Ag
Anti/HBe/TPHA/Slide Test for TP
Anti-HCV

1993

1) Medical information Control System (1)
2) Photographic System for Medical Purpose (1)
3) Video Laparoscope (1)
4) Enlarger System for Photo (1)
5) CO_2 - Incubator (1)
6) Microscope with Photo-System (1)
7) Sero Diagnosis Reagent HIV/HCV/HBSAG/Anti-HBc
HBe-Ag/Anti-HBe/TPHA/VDRL
8) Ultra Filtration System (1)
9) Blood Ammonia Analyzer (2)
10) Convex Sector Probe (1)
11) Ultrasonographic Endoscopy (2)

別 添 資 料

資料2　第3回ブラジル—日本消化器病セミナー資料

ABSTRACTS

III SEMINÁRIO BRASIL JAPÃO
THE 3rd BRAZIL-JAPAN SEMINAR

&

I WORKSHOP

SEPTEMBER 23 AND 24, 1993

GASTROCENTRO - UNICAMP

III SEMINÁRIO BRASIL-JAPÃO

THE 3rd BRAZIL-JAPAN SEMINAR

&

I WORKSHOP

23 e 24 de Setembro de 1993.
September 23 and 24, 1993.

Local: **Place:**	The Royal Palm Plaza Praça Rotatória, 88
Coordenação: **Coordination:**	Luiz Sergio Leonardi A. Frederico N. Magalhães Masao Fujimaki Akiharu Watanabe Tetsu Shimabukuro
Organização: **Organization:**	José Carlos Pareja Ademar Yamanaka Nelson Ary Brandalise Shuji Nambu Jun Kobayashi
Línguas Oficiais: **Official Languages:**	Português/Inglês Portuguese/English

Versão Português/Japonês:
Translation Portuguese/Japanese: Mauro Dantas Neder

Thursday **September 23, 1993**

8:45 am **OPENING:** Luiz Sergio Leonardi
General Coordinator of Gastrocentro - UNICAMP

THEME: CANCER OF ESOPHAGUS AND STOMACH - ROUND-TABLE No. 1

MODERATOR: Henrique Walter Pinotti

TIME	TOPIC	SPEAKER
9:00 am	Lymphadenectomy for Carcinoma of the Thoracic Esophagus (Video)	Teruo Kakegawa Kurume University
9:30 am	Cancer of Esophagus	Henrique W. Pinotti São Paulo University
10:00 am	Results of Surgical Treatment for Early Gastric Cancer	Masao Fujimaki Toyama Med.Pharm.Univ.
10:30 am	The AG-NOR Technique in the Diagnosis of Cancer of Digestive Tract	Miriam A.S.Trevisan UNICAMP
10:45 am	Discussion	

THEME: AIDS IN THE DIGESTIVE SYSTEM - ROUND-TABLE No. 2

MODERATOR: Nelson Ary Brandalise

TIME	TOPIC	SPEAKER
11:15 am	AIDS in the Digestive System	José Olympio M.Santos UNICAMP
11:40 am	Discussion	

Thursday September 23, 1993

THEME: LIVER - ROUND-TABLE No. 3

MODERATOR: Luiz Sergio Leonardi

TIME		TOPIC	SPEAKER
2:00	pm	Treatment of Chronic Hepatitis	Nobuyasu Aiba Toyama Med.Pharm.Univ.
2:30	pm	Diagnosis and Treatment of Hepatocellular Carcinoma	Shuji Nambu Toyama Med.Pharm.Univ.
3:00	pm	Surgical Treatment of Hepatic Metastasis	Luiz Sergio Leonardi UNICAMP
3:35	pm	Discussion	

THEME: CHRONIC PANCREATITIS - ROUND-TABLE No. 4

MODERATOR: José Carlos Pareja

TIME		TOPIC	SPEAKER
4:00	pm	Diagnosis and Treatment of Chronic Pancreatitis	Akiharu Watanabe Toyama Med.Pharm.Univ.
4:30	pm	Surgical Treatment of Chronic Pancreatitis	F. Callejas Neto UNICAMP
5:00	pm	Discussion	

Friday September 24, 1993

THEME: BOWEL DISEASE - ROUND-TABLE No. 5

MODERATOR: Raul Raposo de Medeiros

TIME	TOPIC	SPEAKER
9:00 am	Diagnosis of Inflammatory Bowel Disease	Cláudio Saddy R.Coy UNICAMP
9:20 am	Clinical Treatment of Inflammatory Bowel Disease - Principles	Adriana Sevá Pereira UNICAMP
9:40 am	Surgical Treatment of Inflammatory Bowel Disease - Principles	J. Ricardo N. Góes UNICAMP
10:00 am	Sexual Differences of Colorectal Carcinoma in Japan	Tetsuo Kajiwara Tokyo Women's M. College
10:30 am	Discussion	

THEME: PARASITIC DISEASES - ROUND-TABLE No. 6

MODERATOR: Ademar Yamanaka

TIME	TOPIC	SPEAKER
11:00 am	Clinical Aspects and Diagnosis for Strongyloidiasis	Yoshiya Sato Ryukyus University
11:30 am	Serodiagnosis of Schistosomiasis 1) Evaluation of Serodiagnosis in Endemic Area 2) Application of Serodiagnosis to Patients with Liver Dysfunction	Jun Kobayashi Ryukyus University
11:45 am	Serodiagnosis of Chagas Disease by Gelatin Particle Indirect Agglutination Test	Hiromu Toma Ryukyus University

Friday September 24, 1993

WORKSHOP

Coordination: Luiz Sergio Leonardi
Moderator: A. Frederico N. Magalhães

TIME	TOPIC	SPEAKER
2:00 pm	Sclerosis of Esophageal Varices in Children	M. Fátima Servidoni UNICAMP
2:15 pm	Dilation of Esophagus	Nelson A. Andreollo UNICAMP
2:30 pm	Protocol for Treatment of Esophagitis	Ciro Garcia Montes UNICAMP
2:45 pm	Polyps of Stomach and Duodenum	Fábio Guerrazzi UNICAMP
3:15 pm	Endoscopic Treatment of Upper G.I. Hemorrhage	Luiz Roberto Lopes UNICAMP
3:30 pm	Protocol for Treatment of Chronic Hepatitis	Elza Cotrim Soares UNICAMP
3:45 pm	Diagnosis of Nodular Lesions of the Liver	Jazon R. S. Almeida UNICAMP
4:00 pm	Diagnosis of Hepatopathies by Ultrasound	Ademar Yamanaka UNICAMP
4:15 pm	Steatorrhea in Chronic Pancreatitis - Results of the Treatment	Rogério A.Pereira Filho UNICAMP
4:30 pm	The Follow-up of Polyps of Colon	Marco A. O. Peres UNICAMP
5:00 pm	Discussion	

THE SEMINAR'S ABSTRACTS

TOPIC: CANCER OF ESOPHAGUS

AUTHOR: HENRIQUE WALTER PINOTTI - SÃO PAULO UNIVERSITY

In Department of Esophageal Surgery from Universitary Hospital of School of Medicine - University of São Paulo -595 patients were submitted to treatment according to Table I, in the last 22 years.

TABLE I

	No.	%	Comp.	Mort.(%)
Radical Esophagectomy	123	26.1	21.9	9.7-2.0
Palliative Esophagectomy	46	9.7	50.8	26.1
Endoscopic Tunnelization	53	7.4	52.4	12.0
Surgical Tunnelization	60	8.4	38.3	10.0
Isoperistaltic Gastric Tube	32	3.1	21.8	3.1
Osteomas	158	11.6	23.0	11.6
Esophagocoloplasty	24	29.1	86.0	28.0
Others	99	-	-	-

The preferable palliative treatment is through the isoperistaltic gastric tube associated to Postoperative Radiotherapy, except the tumors of cervical esophagus,better treated by the gastrostomy only in those cases of not advanced esophageal cancer the esophagectomy is the principal procedure.

TOPIC: RESULTS OF SURGICAL TREATMENT FOR EARLY GASTRIC CANCER

AUTHOR: MASAO FUJIMAKI - TOYAMA MED. & PHARM. UNIVERSITY

The early gastric carcinoma is defined in Japan as a carcinoma of the stomach of whichinvasion is limited to the mucosa and submucosa. Since October 1979,706 patients including 258 cases of the early gastric carcinoma diagnosed by histologic examinations of the resected specimens, underwent gastric resection at our department. The cancer invasion was limited to the mucosa in 143 cases. Distal subtotal gastrectomy was performed in 126 patients, proximal subtotal gastrectomy in 8, and total gastrectomy in 9. Although the cancer cell invasion into lymph vessels of the stomach wall was recognized in 2 cases and invasion into the veins was in one case, no lymph node metastasis nor postoperative recurrence was seen in any "m-cancer" cases. On the other hand, the cancer invasion involved the submucosa in 115 cases, in which distal subtotal gastrectomy was performed in 87 cases, proximal subtotal gastrectomy in 11, and total gastrectomy in 16. Of 115 cases the histologic examination of the excised lymph nodes revealed cancer metastasis in 18 cases (15.7%). A curative resection was impossible to perform because of a cancer metastasis to the lymph no des in one case. Four patients out of another 113 patients, in which curative resection could be carried out, died of postoperative recurrence. The choice of treatment of early gastric cancer has changed. Depending on the size, the depth and the histologic type of a cancer, less invasive treatment that is local resection or endoscopic mucosectomy instead of gastrectomy might be indicated for "m-cancer" cases, however, resection of both the stomach and the lymph node group(s) are recommended for "sm-cancer" cases.

TOPIC: LYMPHADENECTOMY FOR CARCINOMA OF THORACIC ESOPHAGUS

AUTHOR: TERUO KAKEGAWA - KURUME UNIVERSITY

Operative procedure for carcinoma in the thoracic esophagus have recently progressed markedly in Japan. A most important aspect involves the cervical and mediastinal lymph node dissection because of high incidence of lymph node metastasis.For that reason extent of lymph node dissection for radical esophagectomy should be performed to cervico-thoraco-abdominal region. Postoperative 5-year survival rate in patients with middle thoracic esophageal carcinoma has been elevated to about 50% after the radical surgery. However, this extended radical lymph node dissection causes postoperative respiratory complications such as tracheal ischemia and impaired cough reflex. In order to prevent these respiratory complications, we perform mediastinal lymph node dissection preserving the right bronchial artery, recurrent pharyngeal nerves, and pulmonary branches of the vagun nerve.

In this film, we would like to present our surgical procedure for extended radical (cervico-thoraco-abdominal) lymph node dissection preserving respiratory functions.

TOPIC: THE Ag-NOR TECHNIQUE IN THE DIAGNOSIS OF CANCER OF DIGESTIVE TRACT

AUTHOR: MIRIAM APARECIDA DA SILVA TREVISAN - UNICAMP

NORs are nucleolar structures responsible for ribosome production. They have characteristic ultrastructural configuration that changes according to their own activity and with the cell cycle. They are made of specific portion of DNA, enzymes and proteins related to translation. Some of these proteins are argyrophilic, so the NORs can be easily demonstrated at the optical level as black dots that can be counted.

The Ag-NOR technique has been used in the last five years to evaluate the proliferation rate of several tissues with the main purpose of graduating, by NORs counting, the cellular behaviour in injury, dysplasia and neoplasia.

We applied the Ag-NOR technique to 98 samples of colorectal mucosa and to 32 samples of gastric mucosa, including normal,reactive, dysplasic and neoplasic tissues. We found considerable overlap in Ag-NOR counting between the groups, specially in colorectal mucosa, therefore we suggest that counting should not be used confidently for diagnosis. However,detailed morphological analysis of the NORs showed some features that may help in the interpretation of neoplasic lesions. These include: # a larger variability in NORs shape and size among cells; # very large NORs with a dark rim and clear center, # a peculiar vacuolated appearance of chromatin with dislocation of NORs to the nuclear envelope. Nevertheless,the absence of one or all of that criteria does not mean absence of neoplasia.

In summary, at present, and specially after a comparative study with PCNA in gastric mucosa, we do not believe that NOR's numbers are a measure of cell proliferation. However, in some samples of neoplastic tissue, NOR morphology may be distinctive enough to help with diagnosis.

TOPIC: AIDS IN THE DIGESTIVE SYSTEM

AUTHOR: JOSÉ OLYMPIO MEIRELLES DOS SANTOS - UNICAMP

The Acquired Immunodeficiency Syndrome (AIDS) was recognized by CDC (Centers for Disease Control) from USA, in 1981, when cases of opportunistic infections and Kaposi s sarcoma were described, in the presence of an unkown immunodeficiency.

In 1983, Barre-Sinoussi et al.identified the etiological agent AIDS, the HIV (Human Immunodeficiency Virus), member of lentivirus sub-family of human retrovirus, corroborated by Gallo et al., and Levy et al., both in 1984. Cellular function loss and cellular destruction occur secondary to progressive viral proliferation, causing opportunistic infections by several types of etiologic agents, viral, fungic, bacterial, Protozoa, Helminths, and the occurrence of associated Neoplasias.

Those affections occur in all organic systems but gastrointestinal tract appears like to be one of those most frequently affected. Studies revealed that 30% to 90% of clinic manifestations are on gastrointestinal tract and the esophagus is the organ mainly affected by opportunist infectious agents.

The endoscopic evaluation, with histologic correlation will make possible better comprehension of the disease offering a better support, even early, to effective treatment for patients.

In a study developed from March 1992 to July 1993, 158 patients (1.8% from 8770 endoscopic examinations of Gastrocentro - UNICAMP) who had AIDS were analysed and followed-up by Ambulatory of Infecto-contagious Diseases, with Gastrointestinal symptoms. Upper digestive Endoscopy was performed with Brushing cytology and biopsies of esophagus, stomach and duodenum.

According to endoscopic and histopathologic findings, some diseases were diagnosed: Unespecific Esophagitis (60%), Moniliasis (30%), Herpetic Esophagitis (6.3%), Cytomegalovirus (3.5%) among non neoplastic diseases of esophagus, and 2% of neoplastic diseases, Lymphoma and Kaposi. Gastric findings: Unespecific Gastritis (85.7%), Specific Gastritis (11.15%) and neoplastic diseases (3.15%), unespecific duodenal diseases were found in 86.4%, specific (Cryptosporidium, Candidiasis, Atypic Bacteriosis) in 11.5% and Neoplasias in 2.1% of patients.

In conclusion, the digestive system is frequently affected in AIDS symptomatic patients, and that biopsies would be performed in every endoscopic finding.

TOPIC: TREATMENT OF CHRONIC HEPATITIS

AUTHOR: NOBUYASU AIBA - TOYAMA MED. & PHARM. UNIVERSITY

Chronic hepatitis B and C are considered to be caused by immunological attack of cytotoxic T lymphocytes to hepatocytes which present viral antigens. However, there are no effective immunomodulative therapies for chronic hepatitis. Therefore, we are making an effort to eliminate hepatitis viruses by interferon (IFN) therapy. Treatment for chronic hepatitis B with IFN-alpha or Beta (6-10 MU/day) daily for 4 weeks induces disappearance of HBeAg in 10-20% of the patients immediately and 25-40% 12 months after the therapy, respectively. IFN therapy following steroid withdrawal is suspected to be more effective for chronic hepatitis B. Complete response by means of IFN therapy for chronic hepatitis C is generally considered by serum ALT levels, but elimination of hepatitis C virus (HCV)-RNA from serum is more desirable.

Treatment for chronic hepatitis C with IFN-alpha or beta (3-10 MU/day) induces complete response in 30-40% of the patients. Complete response is obtained more frequently in patients with HCV genotypes III and IV, mild histological changes (CPH and CAH2A), prolonged therapy including 8 weeks continous plus 4 months intermittent administration, and less than 105 copies of HCV-RNA per ml of serum. There was no evidence to suggest that the different types of IFN (natural IFN-alpha, recombinant IFN-alpha 2a and alpha 2b, and IFN-beta) had significantly different efficacies.

Additional trial for IFN-resistant chronic hepatitis C, for example, combination therapy with IFN and other drugs (Wakan drug and Stronger Neo-Minophagen C), are needed to increase the frequency of complete response. Serious side effects caused by IFN are depression and interstitial pneumonitis, by which we sometimes have to discontinue IFN therapy.

TOPIC: DIAGNOSIS AND TREATMENT OF HEPATOCELLULAR CARCINOMA IN JAPAN

AUTHOR: SHUJI NAMBU - TOYAMA MED. & PHARM. UNIVERSITY

Hepatocellular carcinoma (HCC)is one of the most common cancers in Japan and its approximately 90% is associated with chronic liver diseases (liver cirrhosis, chronic hepatitis). Patients with chronic liver diseases are considered to be in a high risk group for development of HCC. In order to detect HCC in eraly stage, it is very important to keep that group under regular observation.

Patients with small HCC have neither specific symptom nor serological test indicating the presence of HCC. Both of them only detect underlying cirrhosis or chronic hepatitis. Thus, the patients have to be screened by other methods. Namely, patients with liver cirrhosis should undergo abdominal ultrasonography every three months, measurement of serum alpha-fetoprotein (AFP) and a protein induced by vitamin K absence or antagonists II (PIVKA-II) every two months, and either dynamic CT scan or MRI at every six months. For those with chronic hepatitis, ultrasonography and measurement of serum AFP and PIVKA-II should be performed every six months and every three months, respectively. When ultrasonography and/or elevation of the tumor markers are suggestive of HCC, various examinations such as dynamic CT, MRI, hepatic angiography and CT during arterial portography are recommended for further evaluation. It should be noted that small HCC, especially 10 mm in diameter, is well-differentiated and does not necessarily present typical imaging patterns. In that case, ultrasonically-guided tumor biopsy using a fine needle is recommended for final diagnosis of HCC.

Treatment of HCC depends on the liver function and the extent of tumor progression. If liver function is well preserved and the area occupied by tumor is small enough to be resectable, the surgical resection is recommended.

However, if unresectable, the patients are treated by combination of other methods such as transcatheter arterial embolization (TAE), percutaneous ethanol injection (PEI), arterial chemotherapy, radiation, immune therapy and hyperthermia.

TOPIC: DIAGNOSIS AND TREATMENT OF CHRONIC PANCREATITIS

AUTHOR: AKIHARU WATANABE - TOYAMA MED. & PHARM. UNIVERSITY

Diagnosis of chronic pancreatitis is usually performed by the clinical diagnosis criteria (Japanese Society of Gastroenterology, 1983). Group I can be diagnosed from one of the definite findings including chronic inflammation or calcification of the pancreas, impaired exocrine functions (secretion and PFD tests),and abnormal findings of pancreatic duct (ERCP) or image (CT and US). Pancreas biopsy can be performed by the perpapilliary or percutaneous route under endoscopy or US, respectively. Group II had no definite finding but can be diagnosed from other detailed rules. Questionable case is also proposed. The research group for incurable pancreatic diseases in the Ministry of Health and Welfare of Japan suggests a guideline of treatment for chronic pancreatitis by the different stages of disease. Recurrent episode in the compensated stage at the initial clinical course should be treated as acute pancreatitis according to the severity criteria of acute pancreatitis(1990). The interception of recurrent episode and progression to decompensation should be tried by the removal of etiological factors. A large dose of digestive enzyme preparations is used for supplementation of exocrine function according to the mechanism of luminal negative feedback regulation. Anti-enzyme therapy (camostat mesilate) is useful for decreasing pain and serum enzyme levels.In the decompensated stage, supplementary treatment of exocrine and endocrine functions for malabsorption syndrome and diabetes mellitus should be carried out. New therapies including secretin, anti-CCK receptor agent,and ESWL and drug for pancreatic lithiasis are also described.

TOPIC: SURGICAL TREATMENT OF CHRONIC PANCREATITIS

AUTHOR: FRANCISCO CALLEJAS NETO - UNICAMP

The treatment of Chronic Pancreatitis is controversial, having in mind that it presents progressive character. However, the Pancreatojejunal Anastomosis have had more preference because of satisfactory results on the control of painful symptomatology, low rate of postoperative complications and morbidity in late evolution of patients.

In the Discipline of Digestive System Diseases from School of Medicine - UNICAMP - we usually carry out the Longitudinal Pancreatojejunal Anastomosis, preferably. In a study that we developed from January 1983 to February 1993, the surgery was performed in 92 patients. According to the literature, the disease affects more frequently the male in 4th or 5th decade of life, having alcoholism as principal etiologic factor.

The main indication for surgery was painful symptomatology in 100% of patients; otherwise, 60% presented pancreatic cysts; 36% common bile duct obstruction; 10% pancreatic fistulas and 5.5% presented hemorrhage secondary to vascular pseudoaneurysms. Approximately 95% of patients presented weight loss; 27% steatorrhea and 18% secondary Diabetes.

The study showed that the technique was effective on control of painful symptomatology, because 89.2% of patients are asymptomatic independently of the caliber of derivate pancreatic duct, just one patient(1.1%) had the necessity to be reoperated because of painful recurrence. In that particular patient the ERCP showed residual ducts in cephalic region, the patient was redrained and enucleation of cephalic region was carried out due to fibrous tissue and calcification. That patient presented excellent result and the painful symptoms quite disappeared.

In the long term follow-up, approximately 70% of the patients had the weight retrieved, 36% had Steatorrhea and 28% Diabetes. From those 17 (18.4%) patients that persisted with alcoholism, just 4 (4.3%) presented painful symptomatology.

Therefore, according to the good results presented, we can conclude that the Longitudinal Pancreatojejunal Anastomosis has prominent status in surgical treatment of Chronic Pancreatitis, independently of the caliber of pancreatic duct or its associated complications.

TOPIC: DIAGNOSIS OF INFLAMMATORY BOWEL DISEASE

AUTHOR: CLAUDIO SADDY RODRIGUES COY - UNICAMP

The use of Colonoscopy for examination of inflammatory bowel disease can establish the extension and activity of the disease. Through the endoscopic finding it will be possible in some cases to do the diagnosis between Ulcerative Colitis (UC) and Crohn's disease (CD), even in the cases with undefined histological aspects.

The UC inflammation may involve all the colon or more distal segments. The mucosa itself has edematous and granular aspects, however ulcers can be found on several sizes, eventually coalescents, limited by isles of mucosa (Pseudopolyps). In severe cases the intestinal lumen has also blood and mucopurulent secretion. On remission phase or in the mild cases, findings can be discreet, with vascular rattein loss, associated to edema and thin granulation. In the cronical cases is possible to identify strictures, shortness of the colon or even malignancies. To prevent malignant transformation, it is advisable to perform biopsies through the colon and even in apparently normal mucosa.

In CD, the more common finding is the discontinuity of the inflammatory process, the "cobblestone" aspect and the aphtoid ulcers. The aspect of the terminal ileum is very important, even considering the difficulties to do this examination in all cases due to Stenosis in the cecal valve and ileum. The rectum can be spared by the disease in about 50% of the cases, and Stenosis of the involved segments is somewhat more frequent than in UC.

TOPIC: CLINICAL TREATMENT OF INFLAMMATORY BOWEL DISEASE - PRINCIPLE

AUTHOR: ADRIANA SEVÁ PEREIRA - UNICAMP

Localization, activity and duration must be considered to treat Inflammatory Bowel Disease (IBD).

1. General Procedures

Admission the patients only when they present local or systemic complications, moderate or severe disease or when it is necessary to withdraw the patient from his environment.

Diet need to be individualized to offer nutritional support avoiding intolerances. Lactose malabsorption is frequent and can increase the symptoms. Dietary fibers do not bring any benefit and can lead to obstruction when there is ileitis.

Total parenteral nutrition does not modify the disease course. Parenteral diet is indicated in the nutritional support in pre and postoperative,and when the diarrhea or the serious fistulas do not correspond to the routine procedure.

Prescription of vitamins and iron is almost empiric. Considering that the vitamin B12 is important when there is ileitis.

2. Symptomatic treatment

Analgesic and antispasmodic are used for pain and colic. Opiate and anticholinergic must be avoided because they can cause hypomotility, that can lead to toxic megacolon.

Antidiarrheic use is controversial because the diarrhea might improve the symptoms of disease. In acute cases Loperamide and other opiates can be used with care. In choleretic diarrhea from ileus disease we have to use quelants (cholestiramine or aluminum hydroxide).

3. Specific medicamental treatment

Drugs that effectively modulate the disease process: steroids, sulphasalazine and 5-aminosalicylic acid (5-ASA, mesalazine and olsalazine). Corticosteroids are still the most effective for IBD, but side effects are common and dose related.

Immunosuppressive drugs (6-mercaptopurine, azathioprine and cyclosporine) have controversial use.

Antibiotics must be applied in intra-abdominal infections, in abscesses, in fistulas and in bacterial overgrowth of small intestine.

TOPIC: SURGICAL TREATMENT OF INFLAMMATORY BOWEL DISEASE - PRINCIPLES

AUTHOR: JUVENAL RICARDO NAVARRO GÓES - UNICAMP

Inflammatory Bowel Diseases (IBD) are more frequently treated under medical basis, however the indication for surgery can be possible in the natural evolution of the disease. Classicaly, the indication for surgery was frequently in extreme condition, with the patient toxemic and septic, and frequently with a irreversible clinical picture, mainly considering the patients with Ulcerative Colitis (UC). The development of new operative techniques, as the ileal pouch and strictureplasties, associated to the better conditions in postoperative care, have provide an early surgical indication for the treatment of complications or in elective basis in those chronic patients with insatisfactory clinical response to the clinical treatment. As the surgical treatment can erradicate the UC by removing all the colon and rectum, the preservation of the anal sphincters associating to a ileal pouch and with a pouch-anal anastomosis have provide a more frequent indication for surgery. In relation to Crohn's Disease (CD), even considering the better surgical conditions, and the better quality of life after the surgical treatment in the majority of the cases, even in cases needing reoperation, the indication for surgery remains restrict to the treatment of complications without response to the clinical treatment.

The ileal pouch, mainly the "S" and "J" shaped, has provide a very good functional results. However, this operation is associated to a very high frequency of complication, besides the very low mortality. For this procedure it is very important to have a well trainned staff, with skillness in pull-through operations and sphincters preservation.

In relation to CD, the surgical indication, the technical choice, the extend of resection, the choice between a stoma or primary establishment of intestinal continuity, will be supported by the knowledge of the affected intestinal segment, the natural history of the disease, if the treatment will be in urgency or elective basis, the immunological conditions of the patient, the response to the trauma,and the occurrence of associated infection.

TOPIC: SEXUAL DIFFERENCES OF COLORECTAL CARCINOMA IN JAPAN

AUTHOR: TETSUO KAJIWARA - TOKYO WOMEN'S MED. COLLEGE

In recent years, the incidence of colorectal carcinoma has increased markedly in Japan. In this study we investigated differences between male and female patients with this disease through analysis of their clinicopathological features and survival rates.

The subjects were 538 patients with colorectal carcinoma treated by surgery in our department between 1976 and 1991. They comprised 274 men and 264 women, and the mean age was 61.4 years for men and 62.5 years for women, showing no particular difference.

With regard to the lesion site, the incidence of cancers in the right colon was showed slightly greater in women [89 cases(33.7%)] than in men [65(23.7%)]. On the other hand, cancers in the rectum were more in men than in women. Early cancer staying within the mucosa or submucosa was found in 21(8.0%) men and 11(4.3%) women, showing a slightly greater incidence in men. Histologically, well-differentiated adenocarcinoma was found in 162(59.1%) men and 141 (53.4%) women, and moderately differentiated adenocarcinoma in 65 (23.7%) men and 82(31.1%) women. Thus, the former type of adenocarcinoma was more frequent in men, whereas the latter type was more frequent in women. There was no particular difference between the sexes regarding lymph node metastasis or histologic stage. Liver metastasis was more frequent in men [40(14.6%) men vs. 29 (11.0%) women],whereas disseminated peritoneal metastasis was more frequent in women [20(7.3%) men vs. 28(10.6%) women].

The prognosis in terms of the cumulative 5-year survival was significantly better in women (50.5%) than in men (44.3%) among patients with rectal carcinoma ($p<0.05$), although there was no sexual difference in patients with colorectal carcinoma as a whole (47.1% for men vs. 48.8% for women) nor in patients with colon carcinoma (49.9% for men vs. 48.0% for women).

In conclusion, in relation to the location and histologic type, rectal carcinoma and well-differentiated adenocarcinoma were more frequent in men, whereas cancer in right colon and moderately differentiated adenocarcinoma were frequent in women. The prognosis of rectal carcinoma was better in women than in men.

TOPIC: CLINICAL ASPECTS AND DIAGNOSIS FOR STRONGYLOIDIASIS

AUTHOR: YOSHIYA SATO - RYUKYUS UNIVERSITY

Strongyloidiasis, which is relatively common in tropical and subtropical areas, is an intestinal parasitic disease resulting from an infection with *Strongyloides stercolaris*. On of the unique properties of the parasite is its ability to propagate in a host by internal autoinfection. It is probable that the autoinfection commonly occurs in human strongyloidiasis and that the phenomenon is responsible for pathogenicity in the parasitic infection. The parasitic disease is usually asymptomatic in an immunocompetent host, but due to the autoinfection, the infection often progresses to the fatal hyperinfected state under various *immunosuppressed* conditions.

One of the current problems concerning strongyloidiasis is the difficulty to diagnose the infection by faecal examination,because the majority of cases involve chronic, low-level infection. A direct faecal concentration and a filter paper culture have been conventional methods for detecting the larvae in stool samples. However, these methods are not considered sensitive enough for diagnosis of chronic cases, indicating that more than 40% of the cases *might* be overlooked in each examination. Recently, a unique and sensitive method for faecal culture (an agar plate culture) was developed in Okinawa for coprological diagnosis of strongyloidiasis. The agar plate culture method is currently applied for diagnosis of strongyloidiasis in Okinawa.

On the other hand, several serological tests which have recently been developed for strongyloidiasis have proven reliable when used to complement parasitological examination. We have developed two serological tests, micro-ELISA and gelatin particle agglutination test (GPAT), to demonstrate *Strongyloides* infection. The micro-ELISA is convenient for mass-screening where a large group of individuals is to be examined. The PGAT, which can be performed simply within several minutes, is suitable for examination of respectively cases which are required testing occasionally.

The clinical aspects of strongyloidiasis and current problems on its diagnosis will be introduced in the presentation based on our recent studies.

TOPIC: DIAGNOSIS OF SCHISTOSOMIASIS

AUTHOR: JUN KOBAYASHI - RYUKYUS UNIVERSITY

Many attempts have been made to develop a serological test for the diagnosis and epidemiological studies of schistosomiasis;these have included a complement-fixation (CF),indirect hemagglutination (IHA) and indirect immunofluorescence (IF). The enzyme-linked immunosorbent assay (ELISA) is also currently used for the sero-diagnosis with reliable results. The ELISA, however, has some disadvantages for field survey and for diagnosis in the laboratory of terminal hospital, because it involves several experimental steps which are difficult to perform in such conditions.

Recently, a simple indirect agglutination test using newly developed gelatin particles has been used to detect antibodies specific for human immunodeficiency virus type 1 (HIV-1) and human T cell leukemia virus type 1 (HTLV-1). This technique can be performed easily and rapidly without specialized equipment. We tried to use this test for a serodiagnosis of schistosomiasis mansoni.

A total of 64 schistosomiasis patients and 91 controls were studied by GPAT (Gelatin Particle Agglutination Test) and ELISA. The results were similar to those of ELISA. Sensitivity were more than 90%. Moreover, the GPAT seemed to have a sufficient specificity.

One of the advantages of GPAT is useful for mass screening in field condition. Therefore we tried to mass screening for schistosomiasis in the field of high endemic area.

Recently it was reported that ultrasonographic examination is useful for diagnosis of hepatosplenic schistosomiasis. We carried out this examination in field by portable equipments. This time is reported that the results of comparison between serodiagnosis and ultrasonographic diagnosis also.

TOPIC: SERODIAGNOSIS OF CHAGAS'DISEASE BY GELATIN PARTICLE INDIRECT AGGLUTINATION TEST

AUTHOR: HIROMU TOMA - RYUKYUS UNIVERSITY

In the chronic phase of the infection, the diagnosis of Chagas' disease is very difficult because the parasites, *Trypanosoma cruzi*, are found in the blood or cerebrospinal fluid only in very small numbers, making the diagnosis from these smears impractical.

For diagnostic methods in the chronic infection, xenodiagnosis or hemoculture, the procedure in which vectors take a blood meal from patients and after incubation are examined for *T. cruzi*, or the culturing of the parasite from samples usually take from 20 to 60 days and is frequently lacking in sensitivity.

Because of these problems with parasite detection, an alternative is serological testing. Of the various serologic methods, an indirect agglutination test with antigen-coated gelatin particles (GPAT) is known to be available for diagnosis which, because it is capable of being performed within several minutes without specialized equipments, allows the rapid and simple screening of suspected cases. In addition, the GPAT has the advantage that lyophilized antigen-coated gelatin particles are stable for a long period.This time, by the GPAT using *T. cruzi* as the antigen, we have tried to diagnose the trypanosomiasis in two countries of South America. In Paraguay, teh results by the method were quite comparable to those of enzyme-linked immunosorbent assay. Furthermore, the nonspecific reaction to gelatin particles alone was not shown in acute and chronic infections. Now in Brazil, the evaluation of the method is in progress.

THE WORKSHOP'S ABSTRACTS

TOPIC: DILATATION OF BENIGN ESOPHAGEAL STENOSIS

AUTHOR: NELSON ADAMI ANDREOLLO - UNICAMP

The modern treatment of benign esophageal stenosis is conservative. In the past, many patients with benign esophageal stenosis either maintained disphagia during all the life or were submitted to esophageal resections unnecessarily causing high morbidity and mortality. The aim of this presentation is to show the experience of a Programme of Esophageal Dilatation at the GASTROCENTRO - UNICAMP managing this complication.

During the period from January of 1981 to June of 1993, 200 patients were treated with esophageal stenosis, submitted to the total of 1457 session of dilatations by surgeons, physicians and residents. The dilator employed is the EDER-PUESTOW, with metallic ogives and guide wire. The procedure using flexible endoscopies permits detailed follow-up and study of the esophageal mucosa and biopsies. The age of the patients ranged from 12 to 88 years (mean 44.3 years), 116 were males (58%) and 84 (42%) females. The etiologies of the stenosis were: *Postoperative Stenosis*, with 93 cases of stenosis of anastomosis (26.5%) and 7 cases of stenosis after surgeries at the esophagogastric junctions (3.5%); Stenosis secondary to *Caustic Esophagitis* - 58 cases (29%); Stenosis secondary to *Reflux Esophagitis* - 47 cases (23.5%); Stenosis after *Prolonged Nasogastric Intubation* - 15 cases (7.5%); Stenosis after *Radiotherapy* - 10 cases (5%); Stenosis secondary to *Scleroderma* - 3 cases (1.5%); Stenosis secondary to *Sclerotherapy of Esophageal Varices* - 3 cases (1.5%) and *Idiopathic Stenosis* - 4 cases (2%).

The results were considered excellent in 141 patients (70.5%), regular in 39 patients (19.5%) and bad in 20 (10%). Esophageal perforations in 3 cases (1.5%), without mortality.

The final conclusion is that the conservative treatment of the benign esophageal stenosis is possible, without morbidity and mortality, proportioning good results in most patients. The method of dilatation offers the advantage of easy management,well tolerated, rapid, efficient and safe to the patient.

TOPIC: PROTOCOL FOR TREATMENT OF ESOPHAGITIS

AUTHOR: CIRO GARCIA MONTES - UNICAMP

Gastroesophageal reflux disease (GERD) is a common condition that results from gastric contents being refluxed through the lower esophageal sphincter. Heartburn is the most characteristic GERD symptom.

Although GERD pathophysiology is multifactorial, it results primarily from esophageal mucosal exposure to the irritant effects of gastric acid, pepsin, and bile salts. The esophageal mucosa is susceptible to injury when one or more of the following are present: lower esophageal sphincter dysfunction, impaired esophageal clearance mechanisms or delayed gastric emptying.

STUDY PROTOCOL

We are performing a study in patients with endoscopically proven reflux esophagitis in accordance with the criteria proposed by Savary-Miller classification. The criteria for inclusion in the trial are: 1) erosive esophagitis,documented by endoscopy; 2) presence of heartburn (defined as substernal pain, related to posture and aggravated by lying flat or bending forward) or regurgitation (passive backflow of gastric contents into the mouth). Exclusion criteria are: active ulcer disease, anatomical obstruction,esophageal stricture, pancreatitis, other severe gastrointestinal disease such as stomach or bowel carcinoma,history of gastrointestinal surgery, serius cardiovascular, respiratory, neurologic, renal or hepatic disorder and pregnancy.

After the examination, patients are randomised in two different groups for treatment with either ranitidine 150mg twice a day (morning and night), or ranitidine 150mg twice a day plus cisapride 10mg four times a day (before the three main meals and before bedtime). Patients are also encouraged to adhere to lifestyle modifications (e.g., to elevate the head of bed, avoid to eat before bedtime, etc.).

Endoscopy is performed at the beginning of the trial period and at the end of the 8 wk of treatment. Patients who were healed at 8 wk were immediately put on the maintenance phase, with either ranitidine 300mg once a day, or cisapride 10 mg four times a day by 16 wk.

TOPIC: POLYPS OF STOMACH AND DUODENUM

AUTHOR: FABIO GUERRAZZI - UNICAMP

1] 2000 serial upper GI endoscopy exams were analysed finding 59 polyps in 48 patients (2.4% of all exams). The mean age was 54,9 y.o. (33-77) with 24 males and 24 females. Most of them were in stomach (49=83%), followed by duodenal bulb and jejunal mucosa in Billroth II gastrectomy (4 each=7%) and pylorus (2=3%). According to Yamada Classification (Y) we had 10 YI polyps (16.9%), 43 YII (72.8%), 5 YIII (8.4%) and 1 YIV (1.7%). The final diagnosis was hyperplastic polyp for 43 (72.8%) - 3 YI < 5mm, 1 YI > 5mm, 26 YII < 10mm, 7 YII > 10mm, 4 YIII < 10mm, 1 YIII > 10mm and 1 YIV > 20mm. Submucosal tumors were 15 (25.4%) - 5 YI > 5mm, 6 YII < 10mm and 4 YII > 10mm. One polyp YI < 5mm was duodenal lymphoid hyperplasia (1.6%).

2] Analysing Gastrocentro's experience in histological diagnosis and therapeutics for gastroduodenal polyps we found there was some difficulties when YI or YII, mainly when larger than 1cm. We had severe bleeding in some patients when trying partial or total endoscopic polypectomy.Perforation did not occur here but we know it can happen when polypectomy is performed for PM layer lesion. We believe such complications must be avoided as far as possible because most of such lesions are benign. A general protocol is proposed, when such polyps are first studied by Endoscopic Ultra-Sonography (EUS). Those polyps originated in mucosa, muscularis mucosa or submucosa layers will be polypectomized when more than 1cm in size or simple follow-up when less than 1cm.When the polyp is originated in PM layer gastric surgery will be indicated if larger than 2cm. If less than 2cm in size and not suspect at EUS, only follow-up will be indicated. Polypectomy will be performed for YIII and YIV polyps at the first examination when possible.

TOPIC: ENDOSCOPIC TREATMENT OF UPPER G. I. HEMORRHAGE

AUTHOR: LUIZ ROBERTO LOPES - UNICAMP

The diagnosis and therapeutics of Upper Digestive Hemorrhage of nonvariceal cause was helped through the betterment of Fiberendoscopies and more with the possibility to perform procedures, having as goal hemostasis by endoscopic way. Nowadays we can not accept that the endoscopist just perform the diagnosis, but that having indication can contribute in the therapeutics of hemorrhage using one of those disposable methods. We have been using in our Sector the Forrest classification for bleeding lesions found or rather.

Forrest I	a. Stream bleeding
	b. Diffuse bleeding
Forrest II	a. Visible Vascular Stump
	b. Coagulum or bottom with hematin
Forrest III	no sign of bleeding

The indication of some therapeutic procedure by endoscopic way is carried out in Forrest I and IIa cases. There are several disposable methods for endoscopic therapeutics.

a. Topical therapy
- Tissue adhesives
- Clotting factors
- Collagen
- Ferromagnetic tamponade

b. Injection therapy
- Variceal bleeding
- Nonvariceal bleeding
  - Variceal sclerosants
  - Ethanol

c. Mechanical therapy
- Snares
- Sutures
- Ballons
- Hemoclips

d. Thermal therapy
- Electrocoagulation
  - Monopolar
  - Electrohydrothermal
  - Bipolar (Multipolar)
- Heater probe
- Laser

All those methods require training from the endoscopist and in most of them some expensive equipments are necessary, which are not easy to handle, non-portable and some did not already demonstrate efficiency. From among, the most simple, the most cheap, portable and easy to handle is the Injection Therapy of sclerosant or vasoconstrictor substances. It permits hemostasis in almost 100% with a bleeding recurrence rate of 10% and that permits the use of the method again. We have been using for that a solution of 1:10.000 of adrenaline or absolute alcohol or ethanolamine oleate 5% in a concomitant way or not. In a follow-up of 27 patients submitted to sclerosis of bleeding vessel, the hemostasis was obtained in all of the cases and without complications.

We concluded that that is an excellent therapeutic method to be used by endoscopic way in the control of Upper Digestive Hemorrhage not caused by esophageal varices.

TOPIC: PROTOCOL FOR TREATMENT OF CHRONIC HEPATITIS

AUTHOR: ELZA COTRIM SOARES - UNICAMP

Although the recent advances in Viral Hepatitis this entity remains a growing challenge. Many articles about therapy of B Chronic Hepatitis have been published and revealed many patients with a good response. Nevertheless they were only a fraction of patients.

The controlled clinical trials that have been used in the last 10 years reported the importance of the use of several kinds of Interferon (IFN) in the treatment of B Chronic Hepatitis, being the Interferon alpha-2b the most used. The doses varied from 5 million UI (5 MUI), three times a week during four months, to 10 MUI for the same time, including protocol with daily doses of 6-10 MUI. All those protocols revealed demonstrable superiority related to control. 5 MUI three times a week for six months revealed good results in 40% of the patients, includes hepatic histological improvement one year after the end of the treatment(SHERLOCK,1993) The Gastroenterology Department of UNICAMP usually uses 10 MUI three times a week during 16 weeks.

On the regard of C Chronic Hepatitis,since 1986 HOOFNAGLE et al demonstrated that the use of Interferon alpha 2-b was effective in the treatment of Chronic Hepatitis no A, no B. The doses applied have been variable, in which doses from 1,5 MUI to 3 MUI were initially indicated. In recent days, due to high rates of recurrence, the doses became higher (since 5-6 MUI, three times a week during 24 weeks, to 10 MUI of IFN daily for 2 weeks, followed for those same doses three times a week, for 12 weeks more (IINO et al., 1993). In UNICAMP, the protocol recommends 5 MUI, sub-cutaneously, three times a week, during 24 weeks. New studies are desirable, while the literature still indicates high levels of recurrence and that the response to IFN therapy for C Chronic Hepatitis would be dependent dose.

TOPIC: DIAGNOSIS OF NODULAR LESIONS OF THE LIVER

AUTHOR: JAZON R. DE SOUZA ALMEIDA - UNICAMP

1. Hepatocarcinoma varies in its morphology, as it presents like a solitary nodule, multiple or diffusely infiltrant. Its histologic composition and size cause alterations on echogenic aspect. The nodule echogenicity can be hypoechogenic, hyperechogenic or mixed (tumor with partial necrosis). The smaller tumors are generally hypoechogenic and the larger one hyperechogenic.
The capsule of Fibrosis that involves the tumor creates an hypoechogenic halo around that.

2. Cavernous hemangioma is a non-malignant tumor very frequent. It is present from 4% to 7% of population, having its major incidence in women. The right lobe is the most involved, mainly the posterior segments.
The most frequent ultrasonographic finding is about hyperechogenic lesion, homogenous and very circumscribed with central area of low echogenicity. Those characteristics were found from 70% to 80% of the cases. From 15% to 20% of Hemangiomas can be hypoechogenic.

3. Liver Metastatic Disease. The Liver Metastatic Lesions can be hyperechogenic, hypoechogenic, anecoic or mixed, to ultrasound. It is important to define the diagnosis as soon as possible, because with the advance of Hepatic Surgery,Radiotherapy, Chemotherapy and other therapeutic elements, there is a possibility to improve the survival.

TOPIC: DIAGNOSIS OF HEPATOPATHIES BY ULTRASOUND

AUTHOR: ADEMAR YAMANAKA - UNICAMP

In order to evaluate the contribution of ultrasonography for the diagnosis of chronic liver diseases and to standardize the ultrasonographic exam of the liver in the Gastroenterology Clinic of UNICAMP, 114 patients have been studied, all of them both clinically and/or laboratory suspected of suffering from a Chronic Liver Disease. With all the patients, the echographic exam followed the same routine: study of the surface, edges (left and right), alterations of the hepatic parenchyma and of the hepatorenal contrast. Furthermore, all patients have been submitted to hepatic biopsy, for the anatomicopathologic exam. The sensibility of the ultrasonographic method in relation to the anatomicopathologic method has been checked,and the validity both of such exams and their predictive positive values have been calculated.

By using the criterion of exclusion, 14 patients have been eliminated from the study,there remaining a total of 100 patients.

Through ultrasonography, the diagnosis of cirrhosis, schistosomiasis and steatosis may be made with a sensitivity of 100%, 100% and 80%, respectively.

The ultrasonographic signals most characteristic of hepatic cirrhosis are: alterations in the surface, edges, parenchyma and vasculature, in high degrees.

In schistosomiasis, the ultrasonographic signals are the periportal fibrosis, in a moderated to a high degree, as well as of alterations in the surface and edge,in a light to moderate degree.

In steatosis, the ultrasonographic signals are of blotting of the supra-hepatic vases (discreet alteration), with discreetly dull edges, and the presence of hepatorenal contrast, in a moderated to high degree.

The other chronic liver diseases (excluding the ones named hereinabove) have been named in this study "other chronic liver diseases". 19 patients have been included in such group and had their alterations standardized in an aleatory manner.

Ultrasonography, when carried out in accordance with the aforesaid standardization, is an exam which has a great importance for the diagnosis of chronic liver diseases, and should be mandatory in such cases, preceding the hepatic biopsies.

TOPIC: STEATORRHEA IN CHRONIC PANCREATITIS - RESULTS OF THE TREATMENT

AUTHOR: ROGÉRIO ANTUNES PEREIRA FILHO - UNICAMP

The destruction of pancreatic parenchyma by Chronic Pancreatitis lead to exocrine (PEI) and/or endocrine insufficiency (Diabetes Mellitus - DM).

The PEI happens due to production deficiency or enzymes excretion and become clinically manifested by malabsorption, that can be mainly expressed by pancreatic steatorrhea. This diagnosis presents some difficulties ever since there is no sensible, specific, simple and comfortable test. On practice, it is carried out when there is improvement on fecal fat loss with the use of pancreatic enzymes.

Pancreatic enzymes are extract of bull's pancreas or pork's, that can be presented as powder, tablets and capsules of gastric or enteric release. The prescription is based on lipase quantity of the product and according to steatorrhea. The control of the treatment is made by evaluation of nutritional condition and by reduction of fecal fat loss.

In DM visceral polyneuropathy can occur and consequently will occur the bacterial overgrowth of small intestine,and steatorrhea. The diagnosis of this condition is made when there is improvement of fecal fat loss with use of antimicrobic.

In the last 20 years, we have followed approximately 250 patients with chronic pancreatitis and pancreatic insufficiency since some step of the disease, either endocrine or exocrine. In cases of difficult diagnosis, we start with antimicrobic therapeutic test, and when steatorrhea still persists we begin to apply therapeutics with pancreatin.

We use a diet with 70g of fat daily, added to TCM and supplementation of fat-soluble vitamins.

When we use pancreatin in powder or tablets, having in mind that the gastric acid can turn inactive the lipase, the medicine was prescribed for after meals, taking advantage of the power of food tampon, or ever since with antiacid, as aluminum hydroxide, or inhibiting the acid production. Nowadays, we have used Cotazym-F (Lab. Organon), in capsules of enteric release, the only medicine which contains pancreatin and exists in brazilian local market. We have also obtained improvement from steatorrhea when applying 2 capsules after main meals, and 1 capsule after snacks, with impressive results on nutritional improvement and with fecal fat loss.

TOPIC: THE FOLLOW-UP OF POLYPS OF COLON

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The detection and endoscopic resection of polyps in colorectal segment consist in procedure that requires experience, ability and perseverance from the endoscopist, conscientiousness and collaboration from the patient, intensive intestinal preparation and appropriate equipments. The results are dependent on the total resection of lesions, recuperation of specimen and, above all, skill from the anatomopathologist.

In the period from 1981 to 1991, 291 polypectomies were carried out in 167 patients in the Sector, 72 (43%) were male and 96 (57%) were female. The age varied from 1 to 81 years predominating the 6th and 7th decades. The white race were more frequent with 157 (94%) patients.

Related to the indication of polypectomy, in 34.1% of times it occurred in endoscopic following of colorectal cancer; 22.7% by detection in opaque enema; 21.5% by enterorrhagia; 11.9% during the diagnostic examination and 8.9% in the following of previous polypectomies. The sedation was not used in 81% of patients, was necessary in 11.9%, and the anesthesia was used in 6.7% limited on child group.

Related to the localization of resected polyps, 24.9% were localized between cecum and distal transverse; 53.6% between left flexion and distal sigmoid; 18.1% between rectosigmoid junction and anal duct; and 3.4% were multiple. According to the size 13.7% were over 15 cm; 11.7% between 10 and 15 cm; 33.6% between 5 and 10 cm; 37.6% under 5 cm; and 3.4% were multiple.

The anatomopathologic analysis revealed 75.1% of tubular and tubulovillous adenomas; 8.2% infant; 2.7% hyperplasic; 2.1% villous adenomas. Low level dysplasia was present in 7.4% of polyps and cancer in 1.8%.

There were no complications in 162 (97%) patients. A simple bleeding was observed in 2 (1.2%), severe bleeding in 1, perforation in 1 and polyp carbonization of diathermic loop in 1 (0.6% each).

Concluding, in detection and treatment of rectal polyps, the endoscopic examination must be complete and appropriate; the specimen must be quite resected and retrieved, with a deep analysis of possible dysplasic alterations. The complications are not frequent and are related to the used technique.

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