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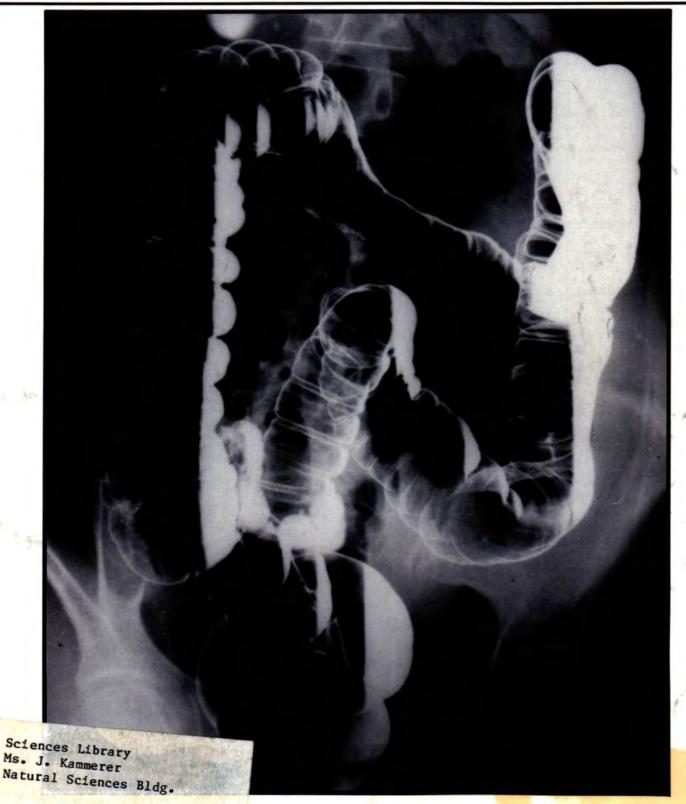
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From the Editor's Desk

Welcome to the third issue of the Medical Journal for 1989/90. In this edition we have a retrospective by Warren Teel on 4 years (and 4th year) of medical school, complete with flashbacks to that first day in medicine, that first day in clinical methods, and that first day in clerkship. Matt Millard takes a look at Tachy, with photos complements of the Medical Journal staff. We also have many other contributions this issue. Rick Smith gives us an interesting perspective on inflammatory bowel disease in a review of radiologic diagnosis. And for a little contrast, we've included an X-ray on this issue's cover. The class reports keep us up to date on what our fellow students are doing. Steve Hoey summarizes the medical "Stanley Cup" playoffs. Alistair Ingram and Arnold Kim of Meds '90 each take a look at their unique elective experiences. Saurin Popat and Sara Fisher of Meds '92 give us an update on the Ethics discussions, and James Frances of Meds '93 takes a brief but

insightful look into naturopathy, and what attracts our patients to it.

We even have a number of letters to the editors. It is rewarding, and sometimes disconcerting, when an editorial stimulates members of the medical profession to write a letter. It is generally difficult enough to get short articles from people, and so we very much appreciate when someone takes the time, of their own volition, to respond to an editorial.

In that vein, I must offer a correction on a statement that I made in the previous editorial. As pointed out by Dr. M. Lampe in her letter, the administration at Victoria Hospital did allocate space for a female doctors' change room in the ORs at Phase I. However, the doors to the change rooms are as yet unlabelled, and an informal survey of a few male and female residents and staff brought the response, "Yes...I think there is one, but I don't know where." The access to the female physicians' change room is

in fact via the nurses' change room, and the majority of lockers are allocated to OR nursing staff. In addition, I, and other female medical students have been told by nursing staff in this change area that we could not wear "their" greens, and insisted that we find them elsewhere. I personally don't think that this adequately addresses the issue of having a separate female physicians' change area. Unless, of course, I am still misinformed, and a separate change area is in another location, in which case I would be happy to let our readers know the exact location. Nor does it address the fact that most female physicians are located at the South Street campus. As a solution, would it be unreasonable to suggest that the male physicians share their change area with the male interns, residents, and clerks and that their current change area be allocated to the female physicians, residents, interns and clerks?

Connie Nasello Paterson, Meds '91

Letters

To the Editors:

As former consultant at Victoria Hospital, I would request that you investigate the veracity of statements that you make in your (CNP) editorials (specifically Feb '90) before printing them.

The new Phase One Operating Rooms have a designated Female Doctor's Change Room (yes, even with a permanent printed sign indicating it on the door). Dr. Mary Lee Myers and I were responsible for this change in 1985. We had made representation to the Acting Medical Director at that time by letter (which included signatures from ALL (6) female consultant staff) indicating that the time had come for recognition of the increasing profile of female physician staff and housestaff. He responded by the designation of that area.

So please, I think that the least you could do would be to indicate that Vic Hospital has at least acknowledged our (female MD) existence in current and future expansion. Uninformed and untrue allegations certainly don't do anything to improve our (female MD) image among colleagues.

> K. Mary Lampe, MD FRCP(C) Program Director-Anesthesia University Hospital

must admit when I browsed through your (CNP) editorial (February '90) the other night I found myself being lulled into a rather passive evening read, since your expressed sentiments seemed reasonable (even from the male perspective) and nowhere near as emotionally charged as some of the recent UWO correspondence. I had worked my way through Montreal and the law school to your medical school experiences, and although I was a little disappointed, I was not entirely surprised. Then I suddenly arrived at the bit about Victoria Hospital, which obviously then got my attention!

The purpose of this letter is to state the following:

(a) You're right.

(b) We at Vic should do something about it.

(c) If I were on the Intern Selection Committee (which I'm not) your editorial would definitely affect your chances of interning at Vic positively.

I have fired off a copy of your editorial to a couple of our senior Administrators, and we'll see what we can do (not withstanding the usual ghastly projected annual deficit).

> Nigel A.M. Paterson, MB, FRCPC Chief of Medicine Victoria Hospital

To the Editors:

When I receive my regular copy of the UWO Medical Journal, I always browse the issue with interest, because it's fun to see what the more articulate/obsessive/dedicated members of the medical student brigade are writing about. I

To the Editors:

As I am sure many of you know, Tachycardia '90 received some harsh criticism regarding alleged homophobic and sexist content. Were we out of line?

I would like to first say that I am sure none of the material included in Tachy was intended to offend or harm any individual or group.

Nonetheless, I believe that some of the humour was unacceptable even if its' intent was not malicious.

In our society, there are groups who, because of a long history of discrimination practiced against them, feel threatened. Homosexuals are only one example of such a group. Other such groups include racial minorities and in some instances women as well.

Barry Love, Meds '93

The University of Western Ontario Medical Journal is published 4 times per year by the students of the U.W.O. Medical School. Established in 1930. Articles, letters, photographs and drawings welcome from the London medical community. Submissions should be typewritten and double spaced, or submitted on computer diskette. Correspondence should be directed to U.W.O. Medical Journal, Health Sciences Centre, U.W.O., London, Ontario, N6A 5C1.

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Deadline for May issue: May 4, 1990

Class Reports

Simply Irresistable

Dateline: LONDON, CANADA. A new drug called "Reality" has been released for trial on medical students. Take as needed to overcome denial that spring break is over and there are only two months left in the term. CAUTION: adverse effects may include depression, anxiety, and frustration.

After a very pleasurable spring break, Meds '93 is off and limping into the final stretch of school. Many of us spent our vacation in warmer climates including seventeen of our class who partied in Daytona Beach Florida. Sorry people, but complaining about sunburn and peeling wins zero sympathy points with the rest of us! It looks like there are no really big events to look forward to in the upcoming two months except exams and summer break.

Even though we are starting to get school on the

brain again, we still have fun reminiscing about Tachy. Everyone who participated had a great time. It was a chance for some "class bonding" to take place, and was an opportunity for us to release creative energy and demonstrate our dramatic talents. Everyone says that directing is a thankless job. Well, that may be so but Meds '93 certainly is indebted to Gord Schacter for directing our play. Gord, you did a super job. Star Wards is sure to be remembered. Ideas are already in the works for next year's production...

Although it seems like a long time ago, the ski weekend was a major event of the term. With January exams over, many of us headed out to Blue Mountain to join the second and fourth year class in a weekend party that I'm sure many of us don't remember all that well. Don't worry - those of us

by Barry Love, Meds '93

who stayed semi-somber can at least remind everyone else that they had a good time. Ski on the ski weekend? Yes, some of us even skied. The other exciting event of February was the OMA weekend at Queen's. Many of us headed down to Kingston to meet students from other Ontario medical schools and to hear informative lectures on current issues in medicine. Everyone who went had a good time. It's almost time to start thinking about next year when Western will be the hosting school...

Well, there really are not many exciting events left in the school year to which we can look forward. Many of us are working on summer employment plans as well as accommodation arrangements for next year - Oh what fun! Other than that, Meds '93 is keeping busy with school, and looking forward to summer.

How Time Flies When You're Having Fun

by Shirley Lee, Meds '92

Dear Mom and Dad.

It's hard to believe that another March break is already over- I swear, I just got my bags packed yesterday, and before I knew it, we were already back to classes! Judging by the number of tanned/sunburned but happy faces surrounding me in class, everyone enjoyed their break- even if they didn't leave good ol' Ontario. A few of us even incured athletic injuries while away; Chris A., our windsurf king, suffered a minor foot gash while braving the shark-infested waters off the coast of Florida, and poor Matt W. was the victim of a dislocated shoulder due to his overzealous waterfall climbing escapades in Jamaica. Koo C. "lambadad" the nights away in the Dominican Republic, while Rosalie S. went parasailing

through the sunny skies of Acapulco...and the rest of us? Well, at least we got to sleep in, which was definitely a nice change compared to our frenzied all-night coffee rituals that got us through the last set of exams! Ah well, maybe I'll get a tan next year.

Meds 92's version of the Sound of Music was a great success at Tachy this year- due mainly to the hard work of our director (who took every form of abuse possible with the greatest of tolerance), Chris Blewett, and his hard-working cast-Maria, Dr. Von Trapper John, Elsa, the kids: Spaz, Granola, Lard, Glans, Prissy, and Pharmacopia, the Nazis, the puppets (including of course, our favourite goat), the trees, the waltzers, and all the behind-the-scenes people who did a fantastic job

on the sets and kept the show running smoothly (esp. Stu and Ian). Special thanks must go to Akira Sugimoto and Laurence Cheng for all their help with the music- it was greatly appreciated.

Oh yeah, I guess I should mention a bit about school. Well, having ICC eight hours a day for the rest of the year is not exactly anybody's idea of fun, HOWEVER, it's a good feeling to know that we have only one more course to go before finishing off this year. We of course, celebrated the end of Micro and Pharm in typical Meds '92 fashion, with an afternoon of sunshine on Barney's patio.....it was so kind of him to have us over!!!

Only two more months to go, and then second year will be over....and then it's on to clerkship (DUM DUM DUM) Can you believe it?!

"Please Sir..."

Now three-quarters (or for some lucky people - more) of the way through clerkship, most of us now feel reasonably confident in clinical situations...until we start thinking how much more we still have to know before the LMCCs...

Tachy proved to be a remarkably good show this year. Remarkable in that a number of people involved were tied up in major rotations -Surgery, Ob/Gyn, Medicine - and did a phenomenal job of bringing the show to us. Oliver Twit brought into opposition those two specialties who love to hate each other, Surgery and Psychiatry. Lydia and Mark are especially to be commended in putting it all together with the involvement of many of the previously unknown talents in the class.

Selective lists are out and it seems that most everyone got a high selection from their lists. Now we're all frantically scrambling to put together our electives. Class elections will be

by Allan Garbutt, Meds '91

coming up soon - probably the last time we will be together as a class before fourth year classes begin in December. And don't forget about the all important step by step guide to CIMS - the future is closer than we think. The formal is rapidly approaching, and hopefully as many of us as possible can evade call and go. Failing that, we can always get together at TGIF or Happy Hour. See you then!

Approaching the Finish Line...

April brings the class of '90 to it's last month of electives and the countdown to the LMCC's. Fortunately for us, Brad, Andrew, Rose and Theresa have organized the LMCC prep-course, and with any luck will help save us from being on the wrong side of the bell-curve.

Since the last Journal we have seen some more milestones passed. Our very last university classes, our very last university exams, and our very last Tachy. Thanks to the talent and enthusiasm of everyone involved this year, our production of The Phantom of the Operating Room proved to

be a fitting finale to our four years of showmanship (five standing "O's!"). Much credit should go to the people who put countless hours into costuming the actors/actresses, building the set, learning the lines, making the music, singing the songs and stepping the steps. It was a lot of work for everyone involved, but maybe, just maybe, we'll miss it all a bit.

By this time everyone knows where they'll be as interns and from reports through the grapevine, most people got what they wanted (if you call doing an internship getting what you

by Phil Vandewaalle, Meds '90

wanted).

Speaking of the grapevine, congratulations go to Mark Kalchman for finally convincing someone to marry him, and to Mike for convincing Wendy to take him back after yet another Tachy.

Also thanks to Marc Lewin and Mark Hilborn for organizing another successful car rally. We are happy to report there were no arrests.

Our thoughts turn to the upcoming formal, that little quiz in May and graduation in June - as doctors. Is this really happening?

Medical Ethics and Future Health Professionals

by Saurin Popat and Sara Fisher, Meds '92

The field of Medicine has reached the point in its development where ethics are being closely examined in all aspects of health care delivery. This has already made a considerable impact on the hospital system, as each hospital in London has its own ethics review board. We feel that there is a considerable need to cultivate the awareness of ethical issues not only at the professional level, but at the educational level as well. That is why, with the support of Assistant Dean Dr. J.A. Silcox and the Westminister Institute for Ethics and Human Values, we here at the University of Western Ontairo Medical School are conducting a series of small symposia accompanied by debate. All recipients of health care education: medical students, nurses, occupational and physical therapists, dental students and faculty are welcome and encouraged to attend.

The symposia were generally held on the third

Tuesday of each month (exept December 1989, March and May 1990) at 3 p.m. at the university. These consisted of a guest lecturer presenting for about 30 minutes. Following each lecture, a discussion was held by the group members. The group consisted of 25 to 35 Health Sciences students. It was our intention that these students became aware of the ethical controversies presented by the speaker and that their views be developed through discussion. Later they could then continue to discuss and debate these topics with their classmates and colleagues. In this way the scope of our symposia enlightened the people that are responsible for dealing with the issues of topography.

Thus far, we had our first meeting guested by Dr. Frank Rutledge, Assistant Coordinator of the CCTC at Victoria Hospital. He spoke on the ethical, moral, legal and medical concerns surrounding "Do Not Resuscitate" orders. The seminar was a great success. Approximately 70 medical and nursing students from all years attended.

We received an enthusiastic response from the participants, involved in the next seminar on Tuesday, October 17 by Dr. J. Turnbull. On November 21, Dr. George Deagle addressed the issue of what doctors could do when they reach the limits of their health care capabilities. In January, the series continued with Dr. Graham Chance discussing the ethics involved in the allocation of resources in medicine.

There already has been much support, and several suggestions, but we are always eager for more input. Contact Sara Fisher or Saurin Popat throught the Undergraduate Medical Office if you have a topic that you would like discussed in a future seminar.

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Canada

Naturopathic Medicine: A Brief Synopsis

by James Francis, Meds '92

The term "Naturopathy" refers to the practice of medicine using an eclectic group of therapies that recognize the body's innate ability to heal. These therapies are aimed at either stimulating and augmenting this natural healing process, or promoting an optimal state of homeostasis which facilitates this process.

Naturopathic training is offered at three colleges in North America. It is precluded by three years of undergraduate work, and included four years of naturopathic medicine - including basic and clinical sciences - board exams, and an

optional preceptorship.

The types of therapies used by naturopaths have been practiced for centuries or millennia in most cases, and include clinical nutrition, acupuncture, homeopathy, botanical medicine (herbs), hydrotherapy, chiropractics, natural obstetrics, etc.

There are a number of philosophies that guide the naturopathic physician's choice of treatment and style of practice. They include:

 Health is a continuum, not an absence of symptoms. Optimal health is an ideal to be strived for in a holistic sense - physically, emotionally and spiritually. This makes preventative medicine a priority and nation duration is a foundation

patient education is a foundation.

2) "Primum non nocere" Above all, do no harm.

3) Treat the underlying source of illness, not just the symptom. Treatment of symptoms can often retard the healing process and allow the cause of the disease to continue to manifest problems.

 A mind body interaction is recognized in all illness. Diseases are not just psychogenic or physical in etiology or symptomology, but are always enmeshed.

 The patient doctor relationship is important in the course of illness. Professional distance is discouraged. The naturopathic view can be summed up by "how can you care for a patient if you don't really care for the patient"

Naturopaths are not trained in the primary care of serious trauma cases, life threatening illness or genetic conditions, and they refer patients to M.D.s or hospitals in such cases. They are, however, quite successful in preventative medicine, pain management, and in treating non life-threatening acute problems and numerous chronic conditions. Their inclusion in the Ontario medical system, similar to other provinces and states in North America, would lead to decreasing medical costs, reduced iatrogenic illness, and most importantly, an improvement in medical care for those needing it.

Eight Men Out

by Steve Hoey, Meds '90

Another season has come to a close in the Meds' Sunday Morning Hockey League. The league was the most competitive it has been in years. Finishing first in the regular season was the team of Meds '90 & '91, followed closely by Meds '92 and then Postgrad. Only three points separated first from third. The rookie team, Meds '93, showed promise despite finishing fourth.

The semi-finals saw a strong Meds 90-91 team triumph over an inexperienced first-year team. Meds '92 had a more difficult time edging out Postgrads 6-5. The consolation final resulted in Meds '93 narrowing out the Post-

grad 9-8 in penalty shots.

The championship final was a much anticipated match between Meds '92 and Meds '90-91. It did not look good for Meds '90-91, as they only had eight skaters out (now you understand the headline). Second year jumped out to an early 3-0, and 4-1 leads. However, third and fourth year, lead by the scoring of Kevin Grant, Calvin Massurella, and Rich Cornell, and the amazing goaltending of Joe Quigg came back with eight straight goals to score a 9-4 upset. It was especially sweet for the fourth years who can now retire as champions.

I'd like to take this chance to thank Greg Hancock, Kevin Grant and especially Paul Hart for the work they put in this year, especially Paul. I couldn't have done it without you. And as I leave this year, I want to say thanks to all the guys in my class who played, for some of my best memories of medical school. By the way, Mike, Gerry and Ted: we won without you.

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Diagnostic Dilemmas

by Sara Fisher, Meds '92

Answers February issue

Case 1: Trichinosis

Case 2: Hematoma on left index finger.



Fig. 1

Case 1

A 76 year old female presents to her physician with a one week history of bloody discharge from the nipple of her left breast. On exam a firmness is found under the areola. What is the likely diagnosis? (Fig. 1, Fig. 2)



Fig. 2



Fig. 3

Case 2

A 25 year old university student developed itching and soreness of his glans penis. He returned from a "wild trip" to Daytona Beach one week ago. On exam a small group of ulcertating lesions are found at the tip of the penis. What is your diagnosis? (Fig. 3)





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Elective at the Mayo Clinic

by Arnold Kim, Meds '90

The Mayo Clinic is the largest, oldest group practice in the world. It is situated in the modestly sized city of Rochester, Minnesota (pop. 60,000). It has two affiliated hospitals: St. Mary's, which is one of the largest private non-profit hospitals in the world with more than 1100 beds, and Methodist Hospital which has an 800 bed capacity. The Mayo Clinic's beginnings date back to the late 1800's. It was founded by William J. and Charles H. Mayo who established world-wide prominence in the medical field through their relentless pursuit of new surgical techniques which were spawned during the infancy portion of the era of aseptic surgery. It is known affectionately by all those who work there as the W.F.M.C. (World Famous Mayo Clinic). Among other things, the Mayo brothers established the new idea of a multispecialty group practice approach to patient care in the USA. I had the good fortune of spending my first one month elective block of my fourth year here. My interest was in the field of neurology, but I also learned much about the institution itself and have acquired much admiration and regard for its heritage and traditions.

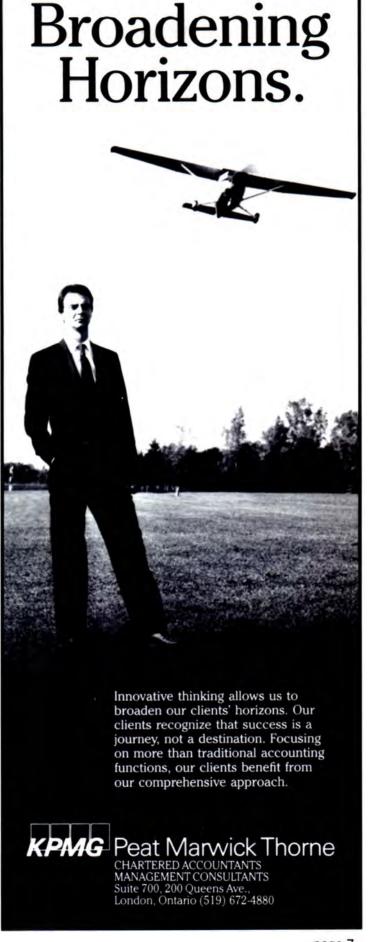
As an educational experience in clinical neurology, none of my previous clinical rotations have surpassed those at the Mayo Clinic. The combination of exposure to many interesting and relatively uncommon diseases; the emphasis on learning rather than being used as a scut-monkey, and the friendliness and efficiency of the staff all made my stay a pleasurable learning experience. In outpatient clinics, there was absolutely no sense of rush. Each consultant usually saw between 6 to 10 patients during the whole day. Typically, the patient presented as a middle to upper class citizen with a history of numerous second opinions over their ailment as far as diagnosis and management. They came to the Mayo for the "definitive" answer and many left after having their diagnosis and management reiterated, but there still was a sense that the patient was happier for it.

Being the kind of reputable institution that it is, rare diseases tends to be unusually concentrated here. While I was on the service, there were diseases such as SSPE (subacute sclerosing panencephalitis), Stiff Man Syndrome, and adolescent with residual deficits from an attack of polio, etc. Not only was there an unusual concentration of rare diseases, but also many prominent figures from the entertainment and political field. While I was there, Ronald Reagan breezed in with a flock of body guards to get his subdural drained. I did not see him once. All I saw was the newly erected wall within the ward that I had worked, that demarcated a new and temporary room, created for his security. What followed were incredible precautionary measures. For what is considered a minor neurosurgical procedure, three of the neurosurgical consultants attended the drainage of his subdural. Two anesthetic consultants were also present and a special team was set up that would be vigilant and to manage any arrest situation.

There is no shortage of expertise in the field of neurology at the Mayo. Many of the neurologists are leading authorities in various facets of the field and engage in ground-breaking research. They are on what has been described as modest salaries compared to what they could earn if they put their reputation into the free market of the US. The attraction and incentive for many of these physicians is the academic freedom and opportunity to carry out major research activities. Shy-Drager and Eaton-Lambert syndrome are named after Mayo neurologists. All those who work at the Mayo have a lot of pride for the efficiency at which the hospitals run and credit the locals who work there as very hard working and conscientious.

Being a private institution, it keeps a wary eye on expenditures. There is a committee that surveys each patient's care that is known as the Utilization Review Board. Occasionally, confrontation occurs between the physician and the board, regarding the legitimacy and the cost-effectiveness of a patient's length of stay or management. Basically, after a patient is discharged and their insurance company makes a good case that unnecessary costs were invoked, the Mayo foundation will have to swallow the costs. Aside from direct payments for medical services provided at the Mayo, the institution receives a significant portion of its funding from generous donations (about \$10 million in 1988 from individuals, about \$20 million from corporations and foundations etc.)

In closing, my impression of the Mayo Clinic is that of a unique species of medical institution that is founded upon a tradition of excellence since its inception that will continue to thrive for some time. It represents the brighter side of an American system that inevitably must contain a counterpart that represents the opposite extreme. It is an ideal to strive for.



page 8

Tachy

With Tachycardia over a month behind us. I think it is now safe to reflect and comment on what was a very successful and enjoyable experience. First of all, I'd like to thank everyone who was involved in this year's show. It's been said that how much you get out of Tachy depends on what you put into it. I know - a lot of people put a lot of work into it, and I hope they enjoyed their moment when the audience laughed or applauded or when someone shook their hand and said "good job". Personally, I didn't think it would be possible to get as much out of Tachy as I put in during the six weeks preceding the show. With all the late nights, scheduling hassles, missed games and appointments, and the gut-wrenching sense of impending doom after Monday's final dress rehearsal, when the curtain went down on Tuesday night and everybody had done so well, the rest of the week seemed better than I had ever imagined.

After the last show many people were saying that Tachy '90 was perhaps the best Tachy ever, or at least in recent short-term memory. Whether it was or not doesn't matter, without any doubt it was a huge success, very entertaining and a hell of a lot of fun. I think that the number of positive comments in respect to how funny Tachy was, how enjoyable it was and how surprisingly clean it was this year said a lot about what people thought of the show as a whole. While the Gazette did feature two letters from people who were apparently offended by some aspect of the show, these comments were very few in number, but seized a lot of publicity because of the sensationalism involved. I think their comments should not be taken lightly, and although I felt their positions and accusations to be a bit extreme, it should be remembered that during a show like Tachy there is the potential to offend some people seriously, and this should be minimized. On the other hand, I think that everybody is a bit offended at some point during Tachy, and frankly I'd be surprised and a little worried if nobody got even the least bit offended during the whole show. Whatever, the beauty of it is that we're amateurs, we laugh at ourselves and expect other people to laugh at themselves as well. Thank God the nurses and surgeons have such a good sense of humor, or my current surgery rotation would be twice the hell it already is!

I think each of the years of medicine, AHS and Nursing deserve individual credit. The nurses continue to build strength and threaten next year to be the most improved show for

three years in a row!

AHS was solid once again with their morose look at children's television. It was great to see things come together after another February ski trip made the final dress rehearsals a real experience.

First year: What can I say? I love it when I see so much enthusiasm, so much participation, so many people going to the ?* & % meds student's weekend, so many women and so much epidermis in the final number.

And second year - if they could do what they did in one week, just imagine what they could do with one month or even two! Really,

by Matt Millard, Tachy Host

it was great to see them put it all together, despite every attempt to throw hurdles in front of themselves. Next year it's anticipated they will do great things — probably within 20 minutes and no solid gold dancers.

Third year - way to go! With all the problems of clerkship you put together a polished and funny show, and managed to push the sense of humor of the surgeons and nurses to the limits. The tough part comes now trying to dream up a way to live up to the legacy Meds '90 has left us — bless them.

Finally, fourth year, What else can be said? Probably the single best show ever done by a meds class. It was polished, it was singing, dancing, it was sets, it was music, it was acting, it was long, yes, it was good, but it was only a show. Now it's time to get down to it: LMCC, internship and life - good luck and thanks for a superb show.

Lastly, I'd like to once again thank all the participants in Tachy, both onstage and offstage. The Merrymakers all did a great and often thankless job. If you haven't slapped them on the back yet - do it, it's not too late. Of course big helpers were Connie, Al, Phil, Bob, Akira, Allison, Jacqueline, Tracy, Donna, Brad, Russ, Steve and a lengthy list of others too numerous to mention. And how about those Tachy pubs!

And of course there was my co-host, Mike Ertel. I admired the way he reassured me before Christmas and said we had a lot of time to get things done. Then, after Christmas when we were mildly concerned and working our butts off each weekend, I admired the way he kept his cool and handled minor setbacks professionally. As Tachy approached and he started seeing more of me and even less of his wife, I appreciated his creativity, his sense of humor and his ability to consume beer night after night. The weekend before Tachy when only two classes were ready to go on and we still didn't know our lines and the brief instant when I said "we're screwed" 20 times in succession, I was glad that he had been there before and actually believed it would go well (even if he was lying). Throughout the show we had a fantastic time, and I realized that one of life's best feelings is the satisfaction that comes from doing something well, even through you had no idea beforehand if it would be successful or not. I appreciated his tips on avoiding sore throats and keeping the voice strong, even through they didn't do him much good when his voice began to disappear Thursday night. Mike conveniently left for B.C. after two weeks of basking in his success, and now I face the large task of filling his size 7 tap shoes. Once again, thanks for everything Mike.

Yes it was a great effort, and we all have reason to be satisfied, but over the summer and into the fall pay attention to those ideas. Listen to the songs and remember the jokes because before you know it, Tachy '91 will be right around the corner, and there's lots of work and of course lots of fun ahead.



Glimpses...

by Warren Teel, Meds '90

Closing night. Saturday night. Brrr. Cold out. Always seems colder closing night. Inside lobby, warmth....and laughter. Whistles....

"8-6-1-4 call 2-5-7-7, 2-5-7-7." Shoot. Now what?

In the corridors outside the auditorium, familiar faces. Bright, happy faces. Akira, "Ak". Keyboard wizard. Roomate. Left sock inside out for good luck. Rehearsals, Ak yelling at eighty tone-deaf doctors-to-be, "It's in the right key, just sing it!" And these same faces laughed and teased him. Faces from four unforgettable, irreplaceable years...

"So take a good look around you, because these are the people you'll be spending the next four years of your life with."

Torn pants. Tattered, filthy coat. Fake cobwebs. Not washed in four sweaty shows, plus rehearsals. It has a certain, ambience? Thank goodness for baby powder. Make up. Face still burning from last night. Ashen-gray base. Skil burning from last night. Ashen-gray base. Skil burning from last night. Other scary. I like it. Other scary faces. Top hats and moustaches. Everyone chatting and laughing and plastering make-up on each other. Hema being Hema. Gerry being Gerry. Yowwch! Michaele grabs my rear-end. Michaele being Michaele.

Something is different tonight. Maybe I'm

"So you're going to stay up all night?!"

"Well, I could always flunk instead."

"Guess you're staying up all night."

Flash! Pictures. And more pictures. Huddling together. "Squeeze in guys. C'mon Alistair, Laurie...get Laurie!" Mugging and being silly. "One more guys." Glimpses, wisps. People practising steps they know all too well. Singing songs. Hamming lines. More laughter. More silliness....

"...and you will have to accept tremendous responsibilities..."

Music from the medley floating through the air. Crowded together looking greedily through cracks in the doors, the curtains. And listen. Music, sweet voices. Akira, breathing life into the gleaming black piano. One sock inside out Applause. And more applause. It sounds like falling rain, or...tears. Tears of appreciation for those sharing a gift. Daring to be vulnerable.

Quietly, moving set on stage. Weeks of wood, nails and paint. Placed in the darkness by costumed silhouettes. Weeks of cutting, sewing and stitching,....

"O.K., this is going to hurt a bit while I...don't cry...just while I put the freezing in....I'm sorry, you're going to have to hold him down..."

Our introduction. Last time, ever. "What's wrong?" Nothing. Just tired I guess. Voices, and music. Voices that will become part of our past, soon. Packed together in the wings, in the darkness. Music drifts amongst the smoke, the set, the light, the costumes, us. We peak around corners to see the audience. Catching a glimpse of what they see. We perform. Disguised. Blanketed in the music, the smoke. Hiding behind the make-up. Anonymity. A fantasy. A masquerade. Simon dominating, filling the stage. Not doctors-to-be. Not anything. Figures imagined. Illusorv. A dream....

"...but this sure isn't what I thought it would

"I doubt it's what any of us thought it would be."

Howls of laughter. Applause. Mike and Rich. B.Z. Both certifiable. Images of Anne chasing them all over her apartment, trying to measure them for a big red suit...

Practicing IV's on each other. "Rich, you

better stop trying to get the I.V., Mike's passing out."

"Nah, he's just kidding."

"O00000...." Bang!

"Oh-oh...

It's different tonight. Last night was better. Better audience? No. Something else. Last night...there was still tomorrow night. Now, there will be no tomorrow night. Hmmmm. Classes end for us in less than two weeks. Big deal. Four years together is long enough.

Ooops, we're on. Another song and dance. Hours practising this. Hours practising other songs and dances for other Tachy's. Four years of Tachy. Do they remember? No.

But we remember. The faces, the characters. The quarrels, the quirks. The laughter and still more laughter. The costumes, the songs and the words. The hours. Why?...

"There has to be one clerk on call every night. You work out the schedule amongst your-selves." One in two? Aren't interns only allowed to work one in three?

Another song ends. It's going too fast. The moments are as vivid but quickly fade and vanish. Sand slipping through an hour-glass. Faces that are so familiar, we've always taken them for granted. A part of what we are, of what we have become, can be seen when we look at each other. Wisps and impressions. Classes, exams, parties, dances, dinners, movies, hockey, broomball, ski trips, Tachy, weddings, birthdays, hospitals, patients, births, deaths....

"And you will have to accept tremendous responsibilities."

Yes, but not right now. Right now we are something else. Singers, dancers, performers, friends. And then...it is over. Glances, glimpses, handshakes and hugs. Happy, yes. But for us there will be no tomorrow night. There will be no next year.



In Old Corners...

by Alistair Ingram, Meds '90

Once a day, a small rack train picks its way slowly down the slopes of the Nilgiris from Ooty to Mettapulayam. On the descent, the traveller is afforded extraordinary glimpses of the arid plains 5000 feet below, reminding him of the heat at mass of humanity that awaits, a world away from the fragrant cool breezes and tea plantations he has just left.

So it is that some, desirous of postponing the prospect one more day, alight at Coonoor. And so I did, to find myself in one of the old attics of the Empire. In a tea-room of a small hotel I found them, forty years on, much too late, excit-

ed at my appearance.

"Do I remember when I first saw India? Of course, what a question! In 1935 my husband dragged me off an old steamer and into Madras, into the heat, smell and crush that defined hell itself. But Madras was a much nicer, less crowded place then. I haven't been for ten years and shan't go back."

"My husband was a doctor, and we went to Coimbatore. Do you know that it was nine years before I first used my hands to eat? It was Mrs. Pannikar who taught me- how well I remember her. We had a lovely house, many servants, but I enjoyed the streets most. When he died, I went back to Madras, but didn't get on the boat. It was 1944, but that wasn't it; I could have gone, you know. I was alone, but recall well that I didn't feel lonely."

"So I went to a friend's house, and soon found a flat. It was in Triplicane, but I wasn't worried. They thought I was mad! But we had such soirees, we Europeans. I think they knew even then that I was becoming too attached, though. That may be true, but I still never missed Ooty- every April we would pack all our things and go. In 1947 there were only four left from our group- the Rutherfords, Mrs. Williams and myself. Why did we stay? I have often thought about it- it really must be the 'stronger climate' that they all talked about. I believe I have felt it- the colours are brighter; I have always felt the grasp of life more firmly here. But I really don't know why we stayed-perhaps it was home even then.

"Those were very sad days. A Muslim gentleman was killed right in front of my flat- it was in March of 1947, I think. We have a great deal to answer for what we did in those terrible times."

"For twenty years I lived in Madras. There were always Westerners coming and going-some for a year, some for much longer. But I found myself with them less and less. I had some Indian friends, but that was something unsaid. How I wish things had been different. The heat seemed to increase as I got older, and I remembered that the Rutherfords had come here, to Coonoor. Even then it had the reputation as a last stop for decrepit Europeans; a sort

of staging-point half-way between Madras and Heaven! I had to come though; Madras was winning."

"So I came to stay in 1968. Only twice have I been down since then. In 1980 my sister died, and I went back to England. It was my first time in England since 1935, and my first ever trip on an aeroplane. Britain was a sad place, not at all like what I remembered. My nieces and nephews looked on me as an old relic. I did not stay long. When my tuberculosis began bothering me two years ago, I had to go to Vellore. Three months I was there. Thank goodness I've not needed to go back. There is no need for me to leave here-look at all of my friends. I think we're all Indian now. Even our mannerisms are gone."

By this time the card game was well over, and I had lost, my mind being elsewhere. I had to go to the market.

"We shall be gone by the time you get back; we never stay past five o'clock. There is no doubt that we have a great deal to answer for. I've spent many years trying to make my reply, and I think I've done it. But I am so happy here now. Even though I'm finished, I could never bear to leave. And that makes me a bit sad, because I was back to evens."

After a few more pleasantries they left, to go back to their gardens in the corners of the attic. Sometimes I think of her; all of them, having said their bit, but now caught on that faraway stage.

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The Radiology of Inflammatory Bowel Disease

by Rick Smith, Meds '90 and Donald H. Taves, M.D., FRCP

Introduction

The term "Inflammatory Bowel Disease" is a broad term used most often when referring to the two prototypes of idiopathic inflammatory bowel disease, Crohn's Disease and Ulcerative Colitis (UC). Crohn's Disease represents the prototype of a primarily discontinuous, asymmetric, transmural disease while UC represents that of a continuous, symmetric, superficial disease. The radiographic features of each are well known and are nonspecific, being shared at least in part between these two diseases and with other forms of inflammatory bowel disease (3,7,8,12,15,18,21). In this paper we will first describe the imaging modalities and techniques available for the diagnosis and assessment of these diseases. This will be followed by text and photoradiographic illustrations which describe the radiologic features seen in early and more advanced disease as well as the common complications of each of these disease entities. Due to the vastness of this subject area, we have limited the discussion to disease involving only the small intestine and colon. The discussion of the disease complications is also limited to include only those related directly to the intestinal pathology.

Imaging modalities and techniques

The imaging modalities available to the physicians for investigation of IBD and its complications include plain film radiography, barium contrast examinations, transabdominal ultrasound (US), computed tomography (CT), magnetic resonance imaging (MRI) and nuclear medicine imaging. The advantages and disadvantages of each will be briefly discussed with emphasis on barium contrast imaging.

In most cases, the initial study ordered when a physician suspects IBD, is that of a barium contrast study. These can take the form of either single or double contrast studies of the small and/or large bowel. Currently, at this center, the study most used for imaging the small bowel in such patients is that of the "dedicated small bowel follow through". This is a single contrast examination that involves the use of large volumes of barium sulphate, frequent and repeated fluoroscopic examination with vigorous manual compression, overhead films and the use of spot films to demonstrate abnormalities. The most important aspect of this examination is good technique (2,20). The dedicated SBFT differs from the standard SBFT, which normally follows an upper GI series, in that the dedicated version pays strict attention to the small bowel, it is not used to examine the esophagus and stomach, it uses a lower density of barium and it does not involve the use of smooth muscle relaxants, thus preserving the normal physiologic state of the small bowel. The single contrast examination as just described, is preferred because of patient acceptance, ease of performance, diagnostic accuracy, low radiation dose and reproducibility. Double contrast examination, though more sensitive in detecting the earliest findings of aphthous ulceration, does not allow for the assessment of the mucosa in the contracted or partially empty state. The assessment of small bowel rigidity and physiologic distension is also lost (2,16,20). Double contrast examination of the large bowel



Fig. 1: Aphthous ulceration (arrows) shown on a double contrast barium enema in Crohn's

however, remains as the imaging method of choice for the detection of IBD (21). Unless stated otherwise, any discussion in this paper of small bowel radiographic changes will be those seen on dedicated SBFT studies, while discussion of colonic changes will be those seen on single or double contrast barium enema studies.

The technique of enteroclysis or the "small bowel enema" may be performed as either a single or double contrast technique. The technique involves passage of a nasogastric tube to the level of the Ligament of Treitz through which the contrast material is passed. Some argue that enteroclysis results are no more accurate in diagnosing IBD than a properly performed dedicated SBFT (2). A great deal of controversy exists at present as to which method is best suited for detection of Crohn's disease (16,20). Preference for one technique over another appears to be very "center dependant".

Transabdominal US is a modality that is most useful for the detection of bowel wall thickening in both Crohn's and UC and associated abscesses and mesenteric masses in Crohn's disease. It is also useful in detecting extraintestinal complications of IBD, assessing the response of bowel to medical treatment and in detecting postoperative recurrence of Crohn's disease (5,17). Due to limitations of specificity and sensitivity, US is not currently used as a primary imaging modality for IBD (18). However, because of the current popularity of US in its use as the first diagnostic investigation in abdominal pain, its fortuitous findings are not to be discounted.

Computed tomography (CT) with its superior contrast resolution, is becoming a more important tool in the diagnosis and follow up of IBD as it can directly image the bowel wall, lymph nodes and surrounding mesentery. It also shares the distinction with US, of being useful in the detection of extraintestinal manifestations of IBD (10.13).

The role of MRI in the evaluation of patients

with suspected or proven IBD is not yet established. Some of the limitations of this method are lack of an optimal contrast agent, long scanning acquisition times and the artifact caused by bowel peristalsis (11,21). The limited availability of MRI technology must also be considered. Potential advantages of MRI due to its ability to image in the coronal and sagittal planes are finer delineation of abscesses, fistulae and sinus tracts (11).

The current nuclear medicine techniques employed in the evaluation of patients with IBD involve the use of leukocytes radiolabelled with Indium-111 or Technetium-99m. Indium-111 has been the most frequently used method with Technetium-99m gaining recent favour (1,19). These scans provide another noninvasive means of localizing diseased segments in both Crohn's and UC although such localization is clearer for the colon which is fixed anatomically versus the mobile small bowel. (1). Traditional radiologic methods have been shown to be superior to nuclear medicine scans of this nature for evaluation of the small bowel (1,4).

Radiologic Features of Crohn's Disease and UC

The classification of the earliest radiologic changes of IBD remains somewhat controversial and there may be a significant amount of interobserver variation in describing these features (8,15). We have attempted here to provide a simple scheme to classify the radiologic changes of IBD into two broad categories, (1) the earliest changes of both Crohn's and UC and (2) all other changes, referred to as later changes.

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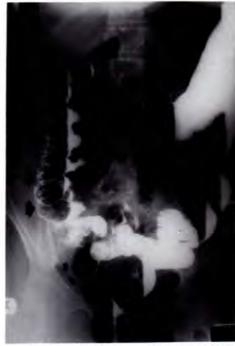


Fig. 2: Fine granular mucosa (smal arrows) and frank ulceration (large arrows) shown on a double contrast barium enema in florid UC.

Continued

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Earliest radiologic changes

The two earliest radiologic features of Crohn's disease are those of (i) aphthous ulceration and (ii) a fine granular appearance to the mucosa. Aphthous ulcers (Fig. 1) correspond to erosions of intestinal mucosa which overlie hyperplastic lymphoid follicles and are usually located at the crest of a small bowel fold. When seen en face these appear radiologically as small punctate barium collections surrounded by an elevated halo of edema. They are usually multiple and appear in approximately 25 - 55% of cases (8,18). The fine granular changes of the mucosa occurs primarily in the small intestine, is evident in up to 85% of cases and is related to slight mucosal and submucosal edema and histologically to wide, blunted and fused villi (7).

The earliest radiolologic change of UC is that of a granular appearing mucosa which is thought to represent mucosal hyperemia and edema (Fig. 2). This figure should be compared to the cover photograph which illustrates normal colonic mucosa. Another very early finding in this disease is that of superficial ulceration representing a more coarsely stippled pattern on the granular mucosa. This represents barium adherent to superficially denuded areas of colonic mucosa (3).

Later radiologic changes

The radiologic changes of Crohn's disease

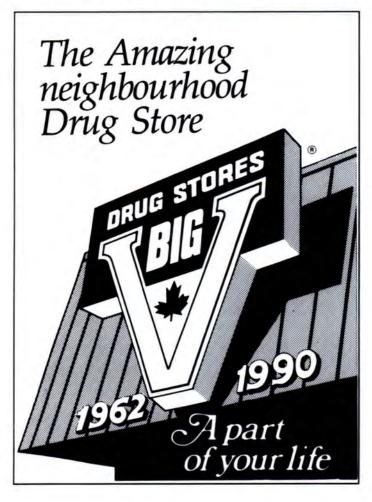
that follow aphthous ulceration and granularity of the mucosa are many. Ulcerative changes may progress to take the form of ulcers which extend laterally, undermining the mucosa transiently taking the form of T- shaped, "collar-button" ulcers. Further progression may lead to a series of longitudinal and transverse ulcers which may intersect to form a "cobblestone" appearance (Fig. 3)(15,22). The term "cobblestone" is not specific to this pattern of ulceration but is also used to desribe any network of longitudinal and transversely oriented intersecting lines of barium seen en face (9). As an example, this appearance may also be produced in the form of thickened edematous mucosal folds seen in the small intestine (15). Barium contrast studies are also useful for the detection of postinflammatory polyps and tubular narrowing of the intestinal lumen. Postinflammatory polyps may appear as either small, rounded lesions indistinguishable from neoplastic polyps or they may form long fingerlike mucosal lesions referred to as "filiform" polyps. The postinflammatory polyp represents reepithelialization of denuded mucosa. In Crohn's Disease they are most often seen in the colon (3,21). Tubular narrowing of the lumen is initially caused by edema and accentuated by spasm but may become fixed as the wall of the intestine becomes fibrotic. The commonly referred to "string-sign" pertains to this tubular

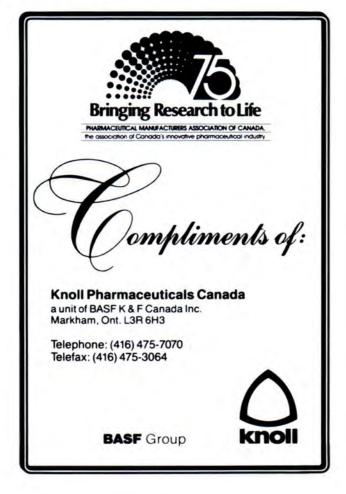
narrowing especially with reference to the terminal ileum (18). The transverse colon on the cover photo illustrates a segment which has undergone tubular narrowing. Crossectional imaging such as CT and US are especially useful for imaging the chronic changes of Crohn's such as mural thickening and mesenteric thickening. Mesenteric thickening is one known cause of the well recognized sign of bowel loop separation in

chronic Crohn's disease.

The later changes of UC are also numerous. As in Crohn's disease, the ulcerative lesions of UC may progress to form the T-shaped "collarbutton" ulcer and further deeper ulceration (Fig. 2). The collar button ulcer is more likely to persist in UC. Other mucosal changes seen later in this disease are the polypoid changes which consist of pseudopolyps, inflammatory and postinflammatory polyps (21). Pseudopolyps (Fig. 5) have been described as residual tags of inflamed edematous mucosa. Inflammatory polyps are simply elevations of inflamed mucosa that may be sessile or appear on a stalk and occur during active disease often on a background of granular mucosa. Postinflammatory polyps on the other hand occur during disease

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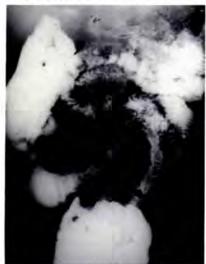


Fig. 3: Cobblestoning (arrows) and bowel loop separation shown on a SBFT in Crohn's Disease.

quiescence (15).

Further changes evident of chronic UC that are easily demonstrated by barium contrast include loss of the normal haustral pattern, referred to as haustral effacement, foreshortening of the colon and tubular narrowing of the colon. Tubular narrowing of the colon is initially thought to be due to spasm and smooth muscle hypertrophy but it may progress to fibrosis and stricture formation. Secondary to this loss of diameter of the rectum along with subsequent fatty proliferation in the retrorectal space, this space may appear to be abnormally widened. Computed tomography is also useful in the detection of the inhomogeneous mural thickening seen in chronic UC as well as rectal and perirectal changes (3,12).

Complications of chronic Crohn's Disease and

Two of the hallmark complications associated with advanced Crohn's disease are abscess formation and the formation of fistulae and sinus tracts. Approximately 25% of these patient will develop an abdominal abscess secondary to either transmural disease with fistulization or resection of diseased bowel segments (12). Abscesses represent the second most common cause of bowel loop separation and are inferred on barium studies secondarily by loop separation, mass effect and spiculation of the bowel wall (9,13). The most effective method of demonstrating these abscesses are by CT (Fig. 4)(12). Fistulae are usually well demonstrated through barium contrast studies however CT is very useful in demonstrating unexpected tracts as well as defining their full extent and the organs with which they commu-These fistulae are known to communicate with adjacent segments of gut, skin, muscle, bladder, vagina, adjacent solid organs and spine (12).

Two of the more potentially lethal complications of IBD are toxic megacolon formation and malignancy. Toxic megacolon (Fig. 5) is seen more frequently with UC but has been reported as a complication of Crohn's disease (21). This entity is defined as dilatation of the colon in a patient who is clinically "toxic", ie. with fever, tachycardia and leukocytosis (14). Although UC is a disease process that is limited to the mucosa,

the formation of toxic megacolon has been shown on pathological specimens to be associated with inflammatory changes through all layers of the bowel through to the serosa (14). The detection of toxic megacolon relies on the plain film and it is important to note that there exists a high risk of perforation during barium enema examination in such patients. The radiologic diagnosis of toxic megacolon is based on colonic dilatation beyond the usual upper limit of 6 cm and of even greater significance, abnormality of the bowel wall. The abnormal colon wall may show a wavy contour with nodular and polypoid projections along its margins due to subserosal edema, mucosal congestion and islands of mucosa which may resemble polyps. The incidence of this entity has been estimated at between 4-14% for patients with UC and approximately 2-4% for those with Crohn's disease. Mortality rates have been estimated at between 5-32% and the mortality risk is higher if perforation occurs (14,21).

The risk of malignancy is increased in both the UC and Crohn's patient populations but is much higher in patients with UC. In UC, the risk is highest in those with pancolitis. In this patient group, the risk of developing cancer Tumours may be associated with fistulae and with strictures, both of which are common in Crohn's disease. Tumour in a fistula is difficult to assess radiographically therefore one should view with suspicion any progressive change in a fistula or stricture as well as fistulae that persist for years or display symptoms of bleeding.(6). Computed tomography can be a valuable tool in detecting and staging tumours in both Crohn's and UC, especially for evaluating segments of bypassed bowel that cannot be studied by barium techniques (12).

Conclusion

The radiologic features of Crohn's Disease and Ulcerative Colitis are numerous and in early disease often quite similar. As these diseases advance, their features become more distinct although radiologic differentiation remains difficult at times. The imaging modalities and techniques currently available, give the physician a number of options in diagnosing and following these disease entities. Barium contrast examinations remain at the forefront of diagnosis while the other modalities are best used in assessing ongoing disease and complications.

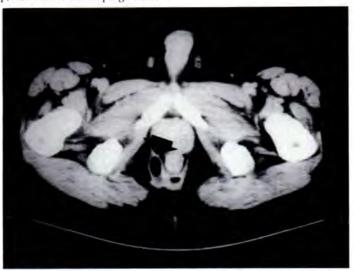


Fig. 4: Pararectal abscess (arrow) shown on a CT in Crohn's Disease.

begins generally after disease of 10 years duration but may be earlier. In those with left sided colitis, the risk of developing cancer seems to begin after a disease duration of approximately 25 - 30 years (6,21). The radiologic features of carcinoma in UC include are a plaque-like, flat and infiltrating lesion that is often difficult to detect. Carcinoma associated with stricture in the colon has been reported as high as 27% (21). These lesions tend to be multicentric (Fig. 6). Epithelial dysplasia, considered to be a precancerous lesion in these patients may be diagnosed on the basis of a nodular, irregular mucosa with sharply angled edges. Detection of this type of mucosa represents an absolute indication for endoscopic biopsy.

The risk of developing an intestinal malignancy in chronic Crohn's disease is approximately as high as it is for the patient with left-sided UC (13). The majority of these malignancies appear in the colon versus the small bowel. In the small bowel, there is a preponderance of cancer in the ileum (6). The radiologic diagnosis of these cancerous lesions is often difficult as they share the same property of those seen in UC, in that they tend to infiltrate and spread along and through the bowel wall.

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Fig. 5: Toxic megacolon with nodular pseudopolys seen in transverse colon and perforation shown on a plain film. Note air around gallbladder (small arrows) and air on both sides of bowel wall (large arrow).



Fig. 6: Three separate malignant tumours (arrows) shown on a double contrast barium enema in chronic UC.

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