

AONEI NEWSLETTER
DARPAN—A reflection of AONEI activities

Volume 1, Issue 8



Cover Photo: Mawphanlur Natural Lake, Nongstoin,
Meghalaya

(PC: Mebalapynhun Shylla)

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Editor's Notes

It's my pleasure to greet you all through the 8th issue of this newsletter, which will be the last that I would be editing. It is heartening to see the development of cancer care in Northeast India, with several centres starting super-speciality courses in oncology in this region. Even in terms of the cancer care facilities, we have seen growth and we have to ensure that the quality of care provided is uniform and adherent to evidence-based guidelines.

After Covid-19 induced hiatus of three years we will be meeting in person at Guwahati and hence this newsletter in a printed format. After the virtual annual meeting in January 2022, we had a physical meeting at Imphal in September, 2022, the report of which is published. We hope to meet often in the coming year.

I am glad to see that while initially our newsletter received a few case reports, this has come down as more of our youngsters are sending their original work to peer reviewed journals. This year, we have a mix of reviews, case reports and opinions/experiences of our members. I thank all the contributors for their efforts. Special thanks to Mebalapynhun Shylla and Dr. Fineone Laloo (Project Staff-Surgical Oncology) for the creativity displayed in designing this newsletter.

Dr. Caleb Harris

Editor and website in-charge

Associate Prof. and H.O.D, Surgical Oncology,
NEIGRIHMS, Shillong

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President's Letter



Dr. C Bhuyan

President,

Association of Oncologists of North East India.

My dear friends,

Greetings,

My best wishes to you all for the New Year -2023.

After a gap of the few years, we are going to physically meet again during our 18th conference of the Association slated for the 3rd, 4th and 5th of February 2023 at Guwahati. It will be a happy occasion to see you all while enjoying a Scientific extravaganza, companionship and camaraderie. I had to retain the President ship for an extended period as elections to the Executive committee could not be held because of COVID and we also kept looking for a way to do it online. I am very happy to see that our Election Committee comprised of Dr. Ravi Kannan, Dr. Kuddush Ahmed and Dr. Apurba Kalita could complete the task in giving us the New Members for the Executive Committee. The new committee is going to take the charge in the General Body meeting to be held during this conference. I wish to see all of you during this conference and thank you personally for reposing so much of love and faith on me in all these years. So come one and come all to participate in this conference.

The next edition of our News Letter is also going to be published during this conference. Editor, Dr. Caleb Harris is making all efforts to present you updated scientific topics written by members of our organisation and also from the rest of the country.

I offer my sincere and best wishes to the conference organising team as well as the Editorial team for a grand success.

Thanking you all once again

Guest Article

Management of Peritoneal Surface Malignancy: My Journey



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Over the past two decades with the advent of newer technology, improvement in surgical skills, and inter-institutional international training amongst surgical oncologists there ushered a subspecialty branch of surgical oncology called *Peritoneal Surface Malignancy (PSM)*. I would like to share my experience in embarking into the journey of getting trained in managing PSMs. It involves two procedures cytoreductive surgery (CRS) and hyperthermic intraperitoneal chemotherapy (HIPEC). The malignancies which are eligible for this procedure are primarily the diseases of the peritoneum e.g., peritoneal mesothelioma, pseudomyxoma peritonei, primary peritoneal carcinoma and metastases to the peritoneum from other organs (ovary, colorectal, stomach).

Around five to six years ago with limited knowledge and much enthusiasm, I leaped into mastering this thrilling and fascinating branch of PSM. My initial learning phase began as a senior resident (M.Ch. student) under Prof. Avanish Saklani and Prof. Ashwin Desouza at my alma mater the *Tata Memorial Hospital, Mumbai*. The extended Operating Room (OR) hours began as an observer followed by assisting (as second assistant) in the CRS that took anytime between 12 to 16 hours and then spending the critical 90 minutes HIPEC duration in OR which only followed as a bedside duty managing the stormy post-operative course in the Intensive Care Unit (ICU) and prolonged ward stay with all sorts of post-operative complications to manage. The spontaneous question that

arose to us as residents and uninitiated trainees is that how much of these procedures make a difference!

It took me five years to get a well-grounded answer to this question. After completing M.Ch. I visited Fondazione IRCCS Istituto Nazionale dei Tumori, Milano (National Cancer Institute, Milan) Italy as an International Trainee in Peritoneal Surface Malignancy under Prof. Deraco Marcello in 2021 which is an international referral center for management of PSM viz. peritoneal mesothelioma and pseudomyxoma peritonei. It was a transformative experience to see the practices and working of a subspecialty (PSM) department that had been established in 1994-95! During my stay in the Institute, I was involved in OPDs, IPDs, ORs, ward rounds and departmental academic activities that included maintaining the database. The team included Prof. Marcello Deraco, Prof. Shigeki Kusamura, Prof. Dario Baratti, and Prof. Marcello Guaglio. The weekly schedule included of two days for ORs, one OPD day, one day for multi-disciplinary case-based discussions, one day for weekly departmental audits and one day for academic activities along with twice a day ward rounds by the entire team of consultants and residents. The most fascinating aspects of the department was the patients' data management of which I was an integral part. Meticulously maintaining a complete data of all patients from 1995 is a painstaking and fruitful task. I learned the nuances of CRS and the dos and don'ts of the procedure. It involves a stepwise resection of

organs that are involved in the disease process. Under the guidance of Prof. Deraco and Prof. Kusamura I learnt the importance and method of case selection and the necessity to perform a complete cytoreduction. I learnt the niche technical aspects of performing peritonectomy and HIPEC. A very important aspect of operating these patients is a surgical team-based approach. A prime benefit and responsibility of surgical team-based approach is to follow the same standard steps of the procedure. This approach reduces the surgeon fatigue, procedure duration, reduces blood loss and complications. The tower of strength to perform such vandalizing procedures are the motivated anesthetists and intensivist. It's a challenge to maintain the intravascular oncotic pressure, acid-base balance, and body temperatures during such long procedures that involve blood and organ loss, fluid shifts and instillation of intra-abdominal hyperthermic fluid.

Upon returning to India, I re-entered Tata Memorial Hospital, now as senior Fellow in Colorectal and Peritoneal Surface Oncology unit under Prof. Avanish Saklani. This time with more energy and vigor. But little did I know that the bar had risen! The complexity of the cases and the challenges associated had increased overtime. We performed CRS-HIPEC for complex pseudomyxoma peritonei, mesothelioma and re-do surgeries that lasted 12 to 18 hours, but now as the primary surgeon or the first assistant. Prof. Saklani inspired us to push our limits, taking difficult decisions and perform challenging resections with a protective umbrella that he provided. The department of anesthesia and ICU were very supportive to conduct such complicated surgeries. I was glad in contributing the nuances that I had learnt at NCI Milan especially with Glisson capsulectomy and small bowel mesentery peritonectomy. Prof. Saklani reiterated the need to perform such complicated procedures only with a team-based approach. I was fortunate to have played a salient role in establishing the Institutional database of CRS-HIPEC procedures at Tata Memorial Hospital. A very vital requirement to establish any database is storage of clinical data through electronic medical records system that we were privy to at Tata Memorial Hospital. We formulated the database with variables (factors) that I gathered from my experience at managing the Institu-

tional database at Milan.

It is necessary for Institutions in India to encourage clinicians to visit foreign universities and learn the newer concepts and implement them into practice. It is also the responsibility of such Institutions to conduct good quality ethical work, to establish and maintain the database that is fundamental to develop evidence-based practices. A cardinal facet of developing a department is that should critically analyze the published research data and modify the practices accordingly.

The main challenges that any Institution will face in developing a department of PSM are the availability of trained doctors, motivated administrations and judicious allocation of resources. The procedure of CRS and HIPEC is an expensive affair and hence the consumables and medicines need to be rationally utilized. Decreasing the hospital stay by reducing OR time and standardizing the procedures and post-operative management by setting up Institutional protocols (based on evidence) is paramount in bringing down the overall cost associated with this procedure.

I believe, a country like ours with the sheer volume of patients and one of the largest human resources in the world, with the right people and right mindset, could be at the helms of affairs and steering the research, practices and development of subspecialty branch of Peritoneal Surface Malignancy.

Women in Surgical Oncology - My Journey, Struggles & Work-life Balance

Dr. Keduovinuo Kreditsu, MS, MRCS, Engl, MCh

After a detailed thorough consultation with an elderly man suffering from gastric cancer, he asked me *“Are YOU the one going to perform my surgery??!!”* Another time, one male patient exclaimed *“I heard that I will be able to get the best cancer surgery done here, BUT I thought you would be a senior male surgeon! I wasn’t expecting to see such a young girl!”*. He never came back. Nearing six and a half years of practice in Nagaland, patients from all 16 districts of the state as well as neighboring states come to my clinic. I have experienced a few odd situations where it was obvious that patients were disappointed to see a “woman” (that too one of small physical stature) on the other side of the table.

When the Editor of the AONEI newsletter, a dear friend and senior colleague of mine, approached me with this topic, I wasn’t sure whether my story would be a fair representation of all women in surgical oncology. The Editor mentioned that he just wanted me to share my journey. So here is the story of a mother, a surgeon, an administrator, a social activist, a wife, daughter, sister and an in-law, all equally represented in me.

My surgical journey began in childhood when my father (a gynaecologist by training, but a human anatomist at heart) introduced me to anatomy. Much later on, in the Anatomy dissection halls of Lady Hardinge Medical College, where my table partners, disinterested in dissection, would allow me to do it all! When I joined MS General Surgery in Maulana Azad Medical College (MAMC), New Delhi, we were a batch of 8 (6 male and 2 female). There were no female seniors or senior residents, and no female surgery consultants! However, in my 3 years at MAMC, I never felt “out of place”. Neither discrimination nor favoritism because I was a woman. I was grilled mentally and physically on par with my male colleagues in training; taught and trained equally with the best in the institute. I have the highest respect and gratitude to the Department of Surgery, for giving me a strong foundation in a gender-neutral

environment.

I was thus caught unaware in the operating theatre the first day as a volunteer at the Government Hospital, Kohima, Nagaland. I had entered the OT and was waiting for “The Surgeon” to arrive. A male surgeon scrubbed in, scanned the room and spotted me and said *“Eh sister, come and tie my gown!”*. Of course! The woman was the nurse: a common stereotype: man = surgeon and woman = nurse. My first month as a bona fide general surgeon, was peppered with comments such as: *“If women are too qualified, they do not get married”*, *“I think you have studied enough for a woman”*, *“It’s not good for women to study too much”*, and lastly, when it came to my choice of superspeciality, *“Why surgical oncology? It’s a depressing field, all your patients will die”*. It is not uncommon to (over) hear comments made by male doctors with regard to women taking up surgery or orthopedics as a career choice: *“What was she thinking?!”*. Interestingly, contradictory to the general perception, Kramer M et al [1] found that women themselves have “stronger gender-career bias”, opting out of surgery as a post graduation specialty. Perhaps it is one’s own choice or perhaps this goes to show how deeply entrenched and normalized sexism is in our field.

I was inspired to pursue Surgical Oncology simply by observing the dedication and stamina of my first consultant surgical oncologist at P.D. Hinduja Hospital Mumbai, Dr. Murad E Lala (MCh), the “first Indian doctor to climb Mount Everest” [2]. We would walk up 16 floors to start daily rounds. Not a single day, did I feel that THIS routine was not meant for a woman. I performed my first radical neck dissection under the supervision of Dr. Sultan Pradhan, one of the most renowned oncologists in our country. In the next 6 years, as I trained at the Tata Memorial Hospital (TMH), Mumbai, I felt equal opportunities were given to residents regardless of gender. A recent survey by Pandrowala et al [3] from the same institute addressed the

issue of gender discrimination in surgical oncology. They found that gender inequities were perceived by both genders, even though it was higher amongst women surgeons (28% versus 6.6% in trainees and 26.6% versus 14.5% in faculty). Biases were highly variable and individual. During my years of training, I believe all the residents were adequately trained in decision making, performing surgeries in all areas of surgical oncology, and post operative management. The institute equipped us to be safe surgeons, as is evident by the quality of work that is being done by the alumni.

As the first surgical oncologist in Nagaland, I started the surgery cum surgical oncology department in a hospital owned by my father in 2016. In the first week of practice, I had 11 patients. I operated my first patient, a case of papillary carcinoma thyroid in my 3rd month. It was a challenging beginning as I had no partner surgeon and no trained assistants or scrub nurses. Almost 6.5 years on, my team and I perform the entire gamut of surgical oncology procedures barring neuro and orthopedic oncology. Long duration procedures include transthoracic esophagectomy, pelvic exenteration, pylorus preserving pancreaticoduodenectomy, composite head-neck resections with radical neck dissections and reconstruction, soft tissue tumor excision with plastic reconstructions*. Several cancer patients, including paediatric age groups are specifically referred to our centre for difficult intravenous access. I routinely insert chemoports and PICC lines, and provide medical oncology services through teleconsultation#. We are also a referral centre for bronchoscopy, as we are currently the only centre in the state for bronchoscopy biopsies. This is reflection of the regional and national medical fraternity's faith in a woman surgical oncologist for these specialized and skill-based procedures – one that continues to grow with each new referral from colleagues within my state, the north-east and even mainland India.

In my case, gender bias has been conspicuous by its absence. As the first and currently the only MCh surgical oncologist in the state of Nagaland, I have received immense

encouragement and support from seniors and colleagues alike, surgeons and other clinicians (mostly men). I believe they see the surgical oncologist “beyond” the woman. I admit to facing subtle disappointments from patients presenting to my clinic; a few comments of doubt here and there- “*Oh! Are YOU the surgeon?!*”, “*You don't look like a surgeon!*”, “*I heard so much about you... but I was expecting to meet a senior male surgeon!*”. Female patients in my clinic express preference for a female surgeon for all ailments, not restricted to breast and/or gynaecology. However, Alkhalidi LM et al have shown that patients consider the “surgeon's professional skills more significant than his/her gender” when an “invasive surgical treatment with a possible health risk was indicated” [4]. I believe this has been true in my journey as a woman surgical oncologist.

An inevitable challenge as a woman surgeon was pregnancy. I am a mother of three, all under six years of age. I worked till my labour pains started, and joined full-time work within a month of my c-section(s). A humorous memory was performing a 12-hour transthoracic esophagectomy with 2 field lymphadenectomy when I was near term. As I was slowly scrubbing in for the marathon surgery (20kgs heavier than my prepregnant self), there was a serious discussion amongst the staff - “*If our surgeon goes into labour, who would complete the surgery!?*” Although I usually plan my surgery list very carefully based on my pregnancy calendar, in and around my expected date of delivery, this incident was one risky exception. It was physically very demanding, but definitely worth it! To finish the narrative, I never went into labour, and the patient lived for another 2 years before succumbing to a recurrence.

Physical activity and getting back to “normal surgical routine” helped me to cope with postpartum blues, and recuperate without a feeling of “time lost” as a surgeon. I drove daily to work with my baby beside me in the car-seat, bottle fed in the traffic, and parked aside for diaper changes. In between OPD and short surgeries, I would take baby feeding breaks. I did face some physical dis-

Acknowledgements (Mentors):

1. Dr. Dushyant Jaiswal, Professor, Dept. of Plastic & Reconstructive Surgery, TMH Mumbai; Dr. Sumanjit Boro, Associate Professor & Head, Dept. of Burns & Plastic Surgery, AIIMS Guwahati.
2. Dr. Ashay Karpe, DM DNB, Medical Oncology (TMH) Fellow Clinical Hematology, Consultant Haematologist, Medical Oncologist & Stem Cell Transplant Physician, Director Sunrise Oncology Care, Mumbai.

-comfort during long duration surgeries. Practising in my own hospital gave me a unique privilege of creating a workplace nursery that allowed for a quick interchange between surgeon and mother duties without compromising either. As my circumstances are uncommon, there is a need for hospitals to provide day-care for the employees' children [5]. In India, under the Maternity Benefit (Amendment) Act 2017 [6], a creche facility is mandatory for every establishment employing 50 or more employees, even though implementation is scarce. Workplace nurseries or child care centres would surely be a way forward for women surgeons and for that matter all women professionals. The presence of a full-time nanny, "a mother figure" at home, in my absence has been another huge advantage (strength) for me, apart from the close knit social support system that characterizes small town society with our strong familial and communal ties.

I often get the "Oh! I feel sorry for your children, you're hardly home!" remark when people see me working late hours. I work on an average 7 hours a day; the remaining hours are well spent - 2 in traffic (where I get to make social calls), 8 for sleep, and 7 at home. Home time includes cooking (I cook 90% of the meals at home), house-keeping, laundry, reading, and shopping for home needs. Despite a fully packed schedule, I always make time to bathe and feed the children AND take them out for fun! I make it a point to get the kids ready personally and drop them to school every day. There is surely a difference between a woman who is a surgeon and a woman who is both a mother and a surgeon. After becoming a mother, I have become more organized. I am always aware of my priorities both at home and at work.

During long OT days, an alarm helps me to do a mid-day check on the children, and it has not affected the quality or outcomes of the surgery. One could see this as a challenge or a distraction, or simply the new (improved) normal.

Working in a family-owned establishment gives me the freedom to adjust my work hours. I perform surgeries on alternate days, with only one major surgery per OT. With this schedule, I have been able to perform 3-4

surgeries in a week. As there is no back up (surgeon), I have been extra cautious in planning and preparing with my team. This has helped me to remain calm and complete the surgery to my satisfaction. The goal is to start early and end early (before sunset), so that I can go home on time, and resume my mother duties. This has been a true challenge that requires conscious effort every day.

The few other challenges (and perhaps some compromises) that I continue to wrestle with are 1) allowing work-related thoughts to interfere or carry forward to my domestic space; mentally detaching oneself from work, and separating the persona of mother, wife and surgeon, 2) time for selfcare; I forget to prioritize myself, and 3) time for academics. I keep up with my reading and target assignments as a review editor of an international journal. I manage to enroll in online classes and attend workshops/lectures at least 2-4 hours a week. I have intentions of writing papers and publishing cancer scenario(s) in Nagaland. I hope for Post MCh fellowships or short course trainings, which have taken a backseat for now.

In the Tata Memorial Hospital, the trainees were taught to be more than just surgeons, more than just surgical oncologists. We were called to be leaders and ambassadors of change in the field of oncology. As a cancer prevention activist, working closely with women organizations, schools and colleges and local bodies, I conduct cancer awareness and cancer screening programmes. Being a woman has not been a deterring factor in such social activities; in fact, it has granted me access to neglected and marginalized audiences and spaces.

Women have always been a minority in the field of surgery since time immemorial. Only 2.8% of surgeons are women in India [7]. As of 2022, in that state of Nagaland, 8.9% of general surgeons are women; there are 5 surgical oncologists: 4 men and myself. The statistics and the past trends should not discourage younger women. Surgical oncology is a physically and mentally demanding field that can be very trying at times. But the rewards are equally intense and gratifying. My journey so far has been a good one, and I encourage all women who have a heart for surgical oncology, to pursue it without hesitation.

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SURGERY FOR LOW RECTAL CANCER: AN OVERVIEW

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Introduction: Low rectal cancer is one which lies within 5 cm from the anal verge. As of today, surgical modality is the established primary curative treatment for rectal adenocarcinomas, with the use of neo-adjuvant and adjuvant therapies when indicated. An exception to this rule is the wait and watch policy which has its proponents and specific indications and well-defined protocols [1].

The goals of surgical treatment include achieving margin negative resection, in terms of negative circumferential resection margin (CRM) and negative distal resection margin (DRM) and proximal resection margin; completeness of total mesorectal excision (TME); optimal lymphadenectomy; sphincter preservation, wherever applicable; mitigation of post-surgery functional disorders and decrease in loco-regional recurrence rates.

Evidence-based medicine has gone a long way in improving the outcomes of rectal cancer, which used to be poor a few decades ago, with high loco-regional recurrences to the tune of about 40% and 5-year overall sur-

vival rates after surgical resection of less than 50%[2].

Current strategies of multimodal management of locally advanced rectal cancer have improved the survival outcomes. Apart from that, the treatment of early rectal cancer have had a lot of development. Endoscopic resection techniques (endoscopic mucosal resection and endoscopic submucosal dissection) are used for early rectal cancer in specialized centres with expertise, as per criteria of selection.

The surgical anatomy of the lower rectum:

As mentioned already, the lower rectum is the first 5 cm of it above the anal verge, which translates to about 2 cm of the rectum above the upper edge of the anal sphincter. This anal sphincter can be appreciated on digital rectal examination. The internal anal sphincter (IAS) is the last 2.5 to 4 cm of the inner circular smooth muscle layer of the rectum. It terminates about 1 cm below the dentate line (pectinate line). It maintains continence against involuntary passage of stool

and flatus. The external anal sphincter (EAS) has a complex anatomy and has been variously described in literature. In simplified terms, it has a subcutaneous EAS, a superficial EAS and a deep EAS, which is a continuation of the fibres of levator ani muscle (LAM). LAM comprises of the puborectalis, the pubococcygeus and the iliococcygeus components. The puborectalis muscle fibres along with the EAS is a single functional unit, which remain in a unique state of continuous tonic activity and responds to various stimuli like rectal distension and increase in intra-abdominal pressure. This is key to the actions of defecation and prevention of incontinence to flatus and stools. There is a potential space between the IAS and the EAS, which is known as the intersphincteric space (ISS) and it can be surgically developed during rectal cancer surgery (intersphincteric resection, ISR).

The 'Holy Plane' of rectal surgery:

One of the important milestones in rectal cancer surgery was the description of total mesorectal excision (TME) by Heald and Ryall in 1982 [3]. This is achieved by dissection in the 'Holy Plane' of rectal surgery which is between the fascia propria of the rectum and the presacral fascia, so that the mobilized rectum will be removed with its surrounding mesorectal fat containing mesorectal lymphatics and nodes and upon removal, appears shiny and bilobed.

The Basingstoke experience from 1978 to 1997, of more than 500 patients showed that the local recurrence rate was only 8% in ten years with the application of TME [4]. The Dutch TME trial confirmed the results [5]. Adoption of TME decreased CRM positivity. A positive CRM (< 1mm) increases the risk of local failure [6] as well as distant metastasis and reduces overall survival [7]. TME, as well as adoption of neoadjuvant treatment strategies, has reduced CRM positivity rates.

Current concepts about distal resection margin (DRM):

The clearance of the DRM is one of the key elements in surgery for low rectal cancer. Distal intramural spread of rectal cancer beyond 1 to 2 cm is not seen in most cases. A generally accepted practice is to aim for a DRM of 2 cm. However, even a ≤ 1 cm is

oncologically safe after preoperative radiotherapy [8].

Nomenclature of surgical procedures:

The surgical procedures for rectal cancers are as follows:

- I. Sphincter preservation surgeries
 - a. Low anterior resection (LAR)
 - b. Ultra-low anterior resection (ULAR)
 - c. Intersphincteric resection (ISR)
- II. Sphincter sacrificing surgeries
 - a. Abdominoperineal excision (APE) or resection (APR)/ Miles operation
 - b. Extra-levator APE (ELAPE)
 - c. Ischio-anal APE

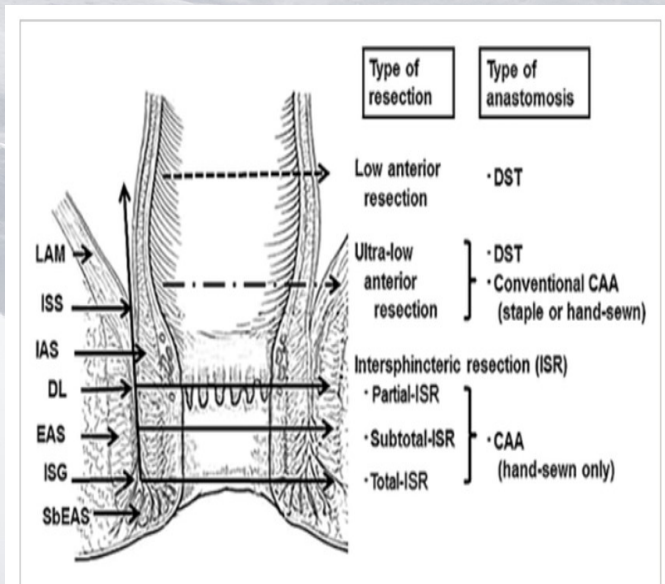


Fig. 1: Levels of distal transection, dissection plane and nomenclature of procedures. ISR = Intersphincteric resection, DL = Dentate line, ISG = Intersphincteric groove, CAA = Colo-anal anastomosis, DST = Double stapling technique, EAS = External anal sphincter, IAS = Internal Anal Sphincter, ISS = Intersphincteric space, LAM = Levator ani muscle, SbEAS = Subcutaneous part of EAS

Low anterior resection (LAR):

It is the procedure where the dissection, rectal division and colo-rectal anastomosis is done below the level of peritoneal reflection. It is done for upper and mid-rectal

tumours.

Ultra-low anterior resection (ULAR):

This procedure entails removal of the entire rectum with division close to the puborectalis muscle. The level at which the distal transection and colo-anal anastomosis is done has been variously described in literature. It usually means that the anastomosis is done within 3 cm of the dentate line. It is done for low rectal tumours.

Intersphincteric resection (ISR):

Schiessel et al first described the ISR technique in 1994. In this procedure, after the abdominal mobilization of the left colon and rectum with total mesorectal excision (TME), the perineal phase of the surgery is started with a circumferential mucosal incision about 2 cm distal to the distal edge of the tumour and the incision is deepened to reach the intersphincteric plane and dissection continued proximally to meet the TME plane developed in the abdominal phase. A colo-anal anastomosis is done to restore gastrointestinal continuity, with the EAS relied on for retaining continence. While the first authors described two types, namely, subtotal and total; subsequently Japanese groups have classified it into three types depending on the level of IAS removal: partial ISR (at the dentate line), subtotal ISR (between the dentate line and intersphincteric groove) and total ISR (complete IAS removal at the intersphincteric groove) [9].

Abdominoperineal excision/resection (APE/APR) or Miles operation:

Sir Ernest Miles described this procedure in 1908 [10]. In the abdominal phase of the operation, the rectum was mobilized down to the level of the LAM, sacrococcygeal articulation and the prostate and the abdomen was closed after a permanent colostomy. The patient was then turned over to the right lateral or semiprone position and the perineal phase of the surgery was done with wide excision of skin, fat and LAM. Later on, the procedure was done in the supine lithotomy or Lloyd Davies position, allowing simultaneous abdominal and perineal phase surgery (if two operating surgeons were available). The perineal surgeon enters the pelvic cavity in front of coccyx, and the levator muscles are

divided laterally close to the rectum, and finally the rectum is dissected off the prostate or the vagina and the specimen is delivered through the perineum.

Extra-levator abdomino-perineal excision (ELAPE):

This is done for tumours threatening to involve the EAS or LAM, where the ISS is involved. This procedure would reduce the chance of bowel perforation or a positive CRM by producing a cylindrical specimen with the LAM as margins, instead of the conical specimen with waisting that is seen in a conventional APE/APR. In the abdominal phase of the surgery, the dissection is not carried to the level of the puborectalis muscle like in a LAR/ ULAR wherein the mesorectum is lifted off the LAM by dividing its investing fascia (Waldeyer's fascia). Instead, the dissection is stopped at the level of just beyond the inferior hypogastric plexus laterally, the sacrococcygeal junction posteriorly and the seminal vesicles or the cervix anteriorly so that the mesorectum remains still attached to the LAM. The perineal phase is usually done in the prone or jack-knife position and the dissection is done outside the EAS and continued to trace the LAM to the obturator internus muscles. The pelvic cavity is entered through the sacrococcygeal junction and the levators divided and finally the cylindrical specimen is dissected off the prostate or vagina.

Ischio-anal abdominoperineal excision:

The indication is a locally advanced rectal cancer infiltrating the LAM, ischioanal fat, or perianal skin or one which has perforated with an abscess or fistulous involvement of the ischioanal compartment. The plane of dissection is much beyond the LAM and includes the entire fat component of the ischioanal space.

In the execution of the surgeries mentioned above, any of the following approaches are applicable:

1. Open surgery
2. Laparoscopic surgery
3. Combined laparoscopic and transanal surgery
4. Trans-anal approach surgery

5. Robotic surgery
6. Combined robotic and transanal surgery

The advent of minimally invasive surgery:

The application of minimally invasive surgery (MIS) techniques in the treatment of colorectal cancer came into vogue after the publication of several randomized controlled trials (RCT) in early 2000s. The European multicentric COLOR (Colon carcinoma Laparoscopic or Open Resection), the UK MRC CLASSIC (Conventional versus Laparoscopic-Assisted Surgery in Colorectal Cancer) trial and the COST (Clinical Outcome of Surgical Therapy) Study group multicentric trial all established the oncological safety of laparoscopic surgery in colonic (and rectal cancer) and provided an alternative to open surgery. The studies showed that there was decreased duration of hospital stay, decreased blood loss, less analgesic requirement in laparoscopic surgery and lower incidence of surgical site infections. There was no difference in the extent of lymphadenectomy and survival outcomes were not different between the laparoscopic and the open approaches. It is noteworthy that the COLOR and COST trials did not include any rectal cancer patients but they did establish the aforementioned facts about the laparoscopic approach. On the other hand, the UK MRC CLASSIC trial included 48% patients with rectal cancer.

There was some concern about increased incidence of positive radial margin after laparoscopic low anterior resection for rectal cancer in the CLASICC trial. For patients undergoing anterior resection, the CRM positivity was greater in the laparoscopic arm (12%) as compared to the open surgery arm (6%) but the difference was not statistically significant (p value = 0.19). There was no difference in CRM positivity for those who underwent APR by laparoscopic approach (20%) versus open approach (26%).

The subsequent COLOR II trial established the equivalence of both laparoscopic and open surgery as far as margin resection rates were concerned whereas postoperative recovery was improved after laparoscopic surgery. In that multicentric RCT including 1044 patients with rectal adenocarcinoma, there was no significant difference in the completeness of TME rates between the lapa-

roscopic surgery (84%) and open surgery (88%) groups. Similarly, there was no difference in the CRM positivity rates (10% in both arms). The 3-year locoregional recurrence rate was 5% in both laparoscopic and open surgery groups. There was no significant difference in the DFS and OS rates. Apart from these, the COREAN trial and the follow up results of the ACOSOG Z6051 and ALaCaRT trials have shown that the oncological outcomes of laparoscopic approach is comparable to open surgery [11].

Challenges to laparoscopic approach:

Three conditions, namely, a narrow pelvis, a bulky tumour in the mid or lower rectum and an obese patient may make it difficult to do a laparoscopic TME and a distal transection in the deep pelvis. A bulky tumour may make it difficult to see beyond it to do distal dissection and transection. One particular problem with the laparoscopic approach is the distal transection of the rectum using a stapling device low in the pelvis. In such challenging situations, problems like conversion to open surgery, perforation or CRM positivity may happen even in experienced hands.

Evolution of transanal approach:

Transanal Endoscopic Microsurgery (TEM) was introduced by Buess et al of West Germany in 1985 with the use of a rectoscope with optical system and instruments.

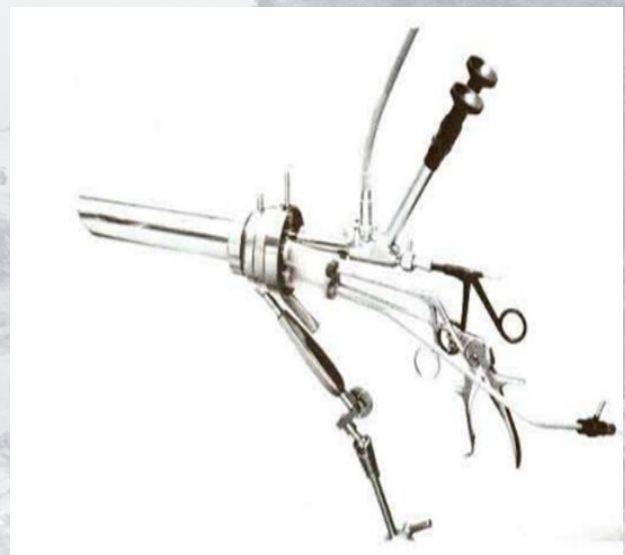


Fig. 2: The TEM platform

In 2010, Sylla et al described transanal endoscopic rectal resection with total mesorectal excision (TME) using the TEM platform for a cT2N2 rectal cancer post-chemoradiation. Laparoscopic mobilization of the colorectum was done using abdominal ports and distal transection and handsewn coloanal anastomosis was done transanally. The authors named the procedure as the first application of Natural Orifice Transluminal Endoscopic Surgery (NOTES) using TEM and laparoscopic assistance. In the same year, Atallah et al used the term Transanal Minimally Invasive Surgery (TAMIS) for a hybrid procedure using TEM and single-port laparoscopy (SILS Port, Covidien) [12].

Trans-anal TME (TaTME):

It needs a platform to allow insertion of trocars and endoscopic instruments while maintaining insufflation to allow for dissection. Such platforms include:

1. Transanal endoscopic microsurgery/operation (TEM/TEO)
2. GelPOINT path transanal access platform (Applied Medical, Rancho Santa Margarita, CA)
3. Laparoscopic single-port devices (SILS port, Covidien)
4. Triport (Olympus Co., Tokyo)
5. Endorec (Aspide, La Talaudiere, France).

With the patient in lithotomy position, anal dilatation is done. A purse string suture is placed distal to the tumour with margins and then a circumferential full thickness rectal incision is made under endoscopic vision using one of the above systems to maintain pneumoperirectum. A posterior presacral dissection is done, followed by identification and preservation of the pelvic autonomic nerves on the posterolateral sides. TME plane dissection is continued laterally and anteriorly. At the level of peritoneal reflection, the peritoneum is opened and the peritoneal pelvic cavity is entered. The division of the inferior mesenteric vessels and the left colon and splenic flexure mobilization is done by laparoscopic approach. In case of a low lying rectal tumour, where insertion of the TME platform will impinge on the tumour, at first, the

dissection is carried out like an ISR and thereafter, the surgery is taken forward like above [13].

Compared to the trans-abdominal LAR/ULAR, TaTME allows a direct (endoscopic) determination of the distal margin. It has a theoretical advantage in the dissection of the distal rectum especially in a patient with narrow pelvis or a bulky tumour, probably resulting in a lower conversion rate. Moreover, a two-team approach may be used.

However, TaTME carries a risk of urethral injury and of purse-string rupture which can potentially lead to tumor cells spillage and implantation or bacterial contamination. Two specific problems related to transanal endoscopic surgery are related to CO2 insufflation and smoke evacuation. The use of a pressure-sensitive insufflator such as the AirSeal system is helpful.

The International TaTME registry is a secure, online voluntary database where surgeons from 203 centres worldwide provide on their patients who undergo TaTME. In 2021, it published the results of TaTME including 2803 patients with primary rectal adenocarcinoma (Feb 2010 to Dec 2018) and reported that TME was complete in 86% patients. With a median follow up of 24 months, the 2-year actuarial rate of local recurrence was 4.8%. The authors concluded that the results supported the oncological safety of the TaTME procedure [14].

COLOR III (a multi-centre RCT comparing TaTME to laparoscopic TME for mid and low rectal cancer, with estimated date of completion in May 2025) and ETAP-GRECCAR 11 (multicentre RCT comparing transanal endoscopic proctectomy to laparoscopic proctectomy in low rectal cancer study, with estimated date of completion in Jan 2024) will generate level I evidence regarding this procedure.

TaTME is a technically demanding procedure and a step-by-step acquisition of skills, including self-learning, training, proctorship and then independent practice are part of the guidelines recommended by the International TaTME Education Collaborative.

Robotic surgery:

The aforementioned technical challenges to laparoscopic TME, for which TaTME found application, can also be mitigated by the use of robotic surgery by virtue of high dexterity EndoWrist instruments with more degrees of freedom, articulation and rotation, tremor filtering, stronger and fixed arm retraction, a surgeon-controlled stable camera system and 3D magnified high-definition imaging. The robotic versus laparoscopic resection for rectal cancer (ROLARR) trial failed to detect a significant difference in the rate of conversion to open approach after laparoscopic or robotic procedures (12.2% vs 8.1%; $p = 0.16$). However, subgroup analysis showed potential benefits of robotic approach in men, obese patients and low-lying tumours. Meta-analyses have suggested higher complete TME rates and better quality of life with decreased urinary complications [15].

Regardless of the surgical approach, the most important thing is to do a good surgery based on oncological principles.

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Enhanced Recovery After Surgery (ERAS):

It involves optimizing all aspects of perioperative care, with an aim to normalize physiological functions as early as possible. ERAS protocols result in faster recovery with fewer postoperative complications and shorter hospital stay. The protocols include a preoperative phase with detailed components of patient education, nutrition, infection control and analgesia; a perioperative phase with defined pathways for anesthesia, antiemetics, fluid management, infection control, avoidance of routine use of drains and tubes; and set templates of postoperative care with early mobilization, analgesia and antiemetic usage, fluid management, early enteral nutrition, early removal of urinary catheter and discharge on fulfilment of set criteria [16].

Conclusion:

The surgical management of low rectal cancer is an evolving field and the rationale behind every procedure described have to be well understood to make a judicious choice, taking into consideration available expertise, for optimal outcomes.

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Undifferentiated carcinoma of the pancreas with osteoclast-like giant cells reported in cystic lesion of pancreas: A rare case and review of literature.

Dr. Pallabika Mandal, Dr. Evarisalin Marbaniang, Dr. Animesh Saurabh ,

Dr. Caleb Harris

Abstract:

Undifferentiated carcinoma of the pancreas with osteoclast-like giant cells (UC-OGC) is a rare and but well described pancreatic malignancy. It is comprised of mononuclear, pleomorphic, and osteoclast-like giant cells (OGC's). It constitutes about 1.4% of pancreatic ductal carcinoma and is likely to occur more in females as in males. Its histopathologic properties are distinctly different. UC-OGC is classified by WHO of ductal epithelial origin. As part of this, we describe a case of a malignant pancreatic neoplasm that was discovered in a 46-year-old patient. We also provide an overview of previously published data to highlight UC-OGC's clinical and pathologic features.

Keywords:

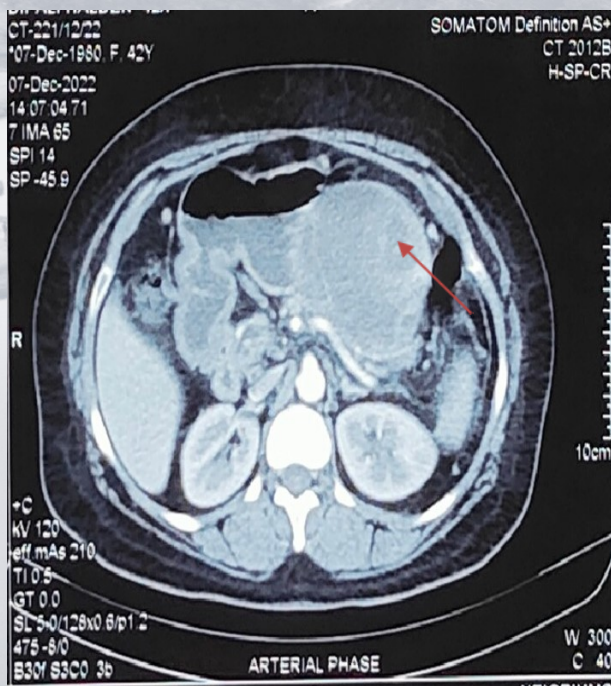
Adenocarcinoma; Carcinoma, Pancreatic Ductal; Osteoclasts; Pancreatic Neoplasms.

Introduction:

Pancreatic carcinoma has an incidence ranging from 0.2 to 5.4 per one lakh population in India and prognosis is quite poor.(1),(2) However, Undifferentiated carcinoma of the pancreas with osteoclast-like giant cells (UC-OGC) are rare neoplasms that make up 1.4% of pancreatic malignancies.(3) The presence of osteoclastic giant cells is a defining characteristic of UC-OGC in the World Health Organization (WHO) classification of pancreatic malignancies and it has a distinct histopathological and clinical profile.(4) Here we describe a case of UC-OGC in a patient who had presented with large cystic distal pancreatic mass.

Case Report:

A 46-year-old lady with a past medical history of hypothyroidism and obesity presented to OPD with palpable intraabdominal mass in the epigastric region approximately 25cm in size. It was not associated with any recent onset pain or fever. There was no history of pancreatitis in the past.



She had undergone a contrast enhanced computed tomography (CECT) scan which revealed a multiloculated complex cystic lesion (22.5cmx15.5cmx13.5cm) with enhancing solid component and septations arising from the body and tail of the pancreas. There was partial thrombosis of superior mes-

enteric vein (SMV) and cavernous transformation of portal vein with multiple collaterals. Radiologically differential diagnosis was mucinous cystic neoplasm. [Figure 1.]

Routine blood investigations were within normal limits including serum CA19.9, amylase and lipase. However, hemoglobin was low (9gm%).

She was discussed in multidisciplinary team meeting (MDT) and was planned for distal pancreatectomy along with splenectomy in view of proximity of mass to splenic artery and the splenic hilum.

Exploratory laparotomy was performed. The abdomen was checked for any peritoneal or liver deposits. Lesion was confined to distal spleen and SMV was free. Distal pancreatectomy was done with adequate free pancreatic margin. Splenic artery was posterior to the mass and planned splenectomy was done. [Figure 2].

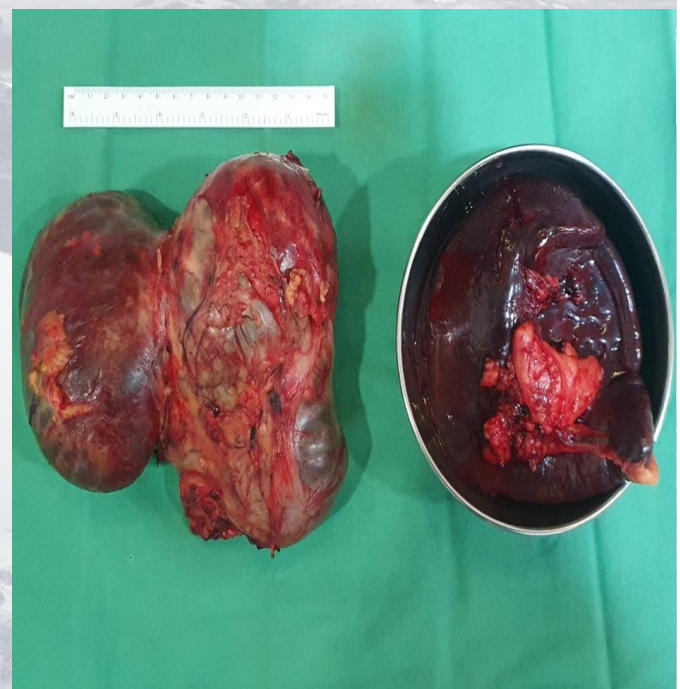


Figure 2: Post operative specimen: A) Distal pancreatectomy with solid cystic mass, B) Splenectomy

Post operative period was uneventful. She started on oral diet from post operative day 2 and she was discharged on post operative day 5.

Histopathology report stated grossly 16.5cmx 9cmx8.5cm cystic lesion the distal pancreatectomy specimen. Cyst was tense, capsulated, grey white to brown with congested blood vessels. Cut section revealed yellowish cyst content with multilocation and solid areas of size 10cm x7.5cm x 6 cm. Distal pancreas was posterior to the lesion with multiple lymph nodes. The cut end of the pancreas was free from tumour.

Microscopically studied section showed cellular tumour composed of neoplastic cells arranged in sheets and singly. These cells are pleomorphic, oval to spindle in shape having high nucleus to cytoplasmic ratio with coarse chromatin and prominent nucleoli and moderate amount of cytoplasm. Section also showed multiple osteoclasts like giant cells and histiocytes in the background of hemorrhage and necrosis. Features were suggestive of undifferentiated carcinoma with osteoclast like giant cells (UC-OCG). Eight lymph nodes were identified and all were free of tumour. No lympho-vascular invasion (LVI) or perineural invasion (PNI) were identified.

Immunohistochemistry was done which showed CD68- diffusely positive in giant cells and histiocytes. Ki 67- > 20% in hotspot areas.

TNM staging (AJCC8th ed)
pT3N0M0.

Case was further discussed in MDT and was planned adjuvant gemcitabine-based chemotherapy.

Discussion:

Undifferentiated carcinoma with osteoclast like giant cells has been classified in WHO classification of pancreatic tumour (2019) as a subtype of adenocarcinoma of ductal origin.(4)

It was first described by Juan Rosai in 1968. It is a very rare but well described in literature. Among pancreatic malignancies of ductal origin, it has incidence of 1.4%(3)

UC-OCG is more common in middle-aged and elderly patients with the average age of 63 years. Most patients are females (male: female = 7:10). The clinical symptoms are nonspecific and mostly manifest as upper ab-

dominal pain and/or weight loss. Loss of appetite, abnormal taste, nausea, steatorrhea, and some other gastrointestinal symptoms have also been reported in some cases. Jaundice and anaemia have been reported occasionally.(5) Our case also had low haemoglobin preoperatively. Almost half of reported cases show elevated serum CA 19.9. Serum CEA may also be raised in few patients.

The commonest location is head of pancreas (up to 60%).(6) However distal pancreatic tumours are usually larger in size at presentation.

On contrast enhanced computed tomography (CECT) scan UC-OCG is commonly seen as cystic lesion with enhancing solid component within. However, purely solid lesions are also reported. Most of the lesions have regular well-defined borders. Calcifications are rare. Magnetic resonance (MR) T1-weighted imaging shows low signal intensity with or without patchy high signals. T2-weighted imaging shows a high-intensity central cystic portion with low-intensity septa and peripheral solid tissue.(5).

¹⁸F-fluorodeoxyglucose positron-emission tomography-CT study usually high uptake within the tumour and the septations. (7).

On histopathology UD-OCG has three types of cells- mono nuclear neoplastic cells, mononuclear histiocytes and multinuclear osteoclast like giant cells. Usually there is necrosis and haemorrhagic background. The tumour may show a ductal origin. However, it may arise in the background of mucinous cystic neoplasm of pancreas or intraductal papillary mucinous neoplasm (IPMN).(4),(8).

Immunohistochemistry typically shows histiocyte and osteoclastic giant cells positive for CD- 68. Neoplastic cells may be positive for cytokeratin (CK) AE1/AE3, CK7, CK8/18. P53 positivity has been reported in >50%. Ki67 index is high.

Surgery is usually the first line of management for resectable lesions. Pathological staging is done as per TNM staging for pancreatic exocrine tumours. Adjuvant chemotherapy with gemcitabine and paclitaxel has been reported.(3) Role of radiotherapy is not established. There are reports of using

targeted therapy in metastatic cases. Obayashi et al reported using pembrolizumab for PDL1 positive lung metastasis.(9) Olaparib can be used for BRAC2 positive tumours.(10)

Even though UC-OGC is rare, Miraki et al in a series of 38 patients which showed that 5 year survival was about 59% which was significantly better prognosis compared to ductal adenocarcinoma of pancreas.(3)

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Conclusion:

It is important to differentiate UC-OGC from other pancreatic malignancies as prognosis is relatively better. Therapeutic guidelines are limited due to the rarity of this subtype. Further studies are needed help establish treatment modalities and molecular biomarkers.

Fighting the Cancer: Can We?

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Oncology is about a story of shape shifting illness, which is most relentless and insidious enemy of humanity, known to medical profession for thousands of years. Society and humanity is knocking at the door of the medical profession for a cure since then. Every year in India, around one million new cancer cases are diagnosed and around 6,00,000 to 7,00,000 people die from cancer, this death toll is projected to rise to around 1.2 million deaths per year by 2035, a new report on cancer care in India published in The Lancet Oncology reported. The first description of cancer was given by Imhotep, Egypt physician ways back to 2625 BC. Several diseases rose and fell causing massive deaths and despair, sometimes washing away cities, small countries and significant fractions of humanity. But if cancer existed in the interstices of these massive epidemics. Cancer is an age related disease - sometimes exponentially so. The risk of breast cancer, for instance, is about 1 in 400 for a thirty year old woman and increases to 1 in 9 for a seventy year old. Nineteenth century doctors often linked cancer to civilization: The cancer, they imagined was caused by the rush of modern life, which somehow incited pathological growth in the body. The link was correct, but the causality was not correct probably; Civilization did not cause cancer, but by extending human life civilization unveiled it.

We, modern humans are chemical apes having discovered the capacity to extract, purify and react molecules to produce new and wondrous molecules; we have begun to spin a new chemical universe around ourselves and immerse ourselves in a variety of waves from the devices in our homes. Our bodies, our cells, our genes are thus being immersed and re-immersed in a changing flux of molecules - pesticides, pharmaceutical drugs, plastics, cosmetics, oestrogens, food products, hormones and even novel forms of physical impulses such as radiation and magnetism. Some of them inevitably will be carcinogenic, waiting to be unveiled. We cannot wish this world away; our task is to discriminate bona fide carcinogens from innocent and useful

bystanders. It is rightly said cancer, resides at the interface between society and science. Virchow called it neoplasia and Hippocrates way back in 400 BC described it as "KARKINOS", meaning a crab. However it may be described, Cancer cell is a desperate individualist in every sense. The cancer asphyxiates us by filling bodies with too many cells; Cancer is an expansionist disease; it invades through tissues, sets up colonies in the hostile landscapes, seeking "sanctuary" in one organ and immigrating to another (metastasis). We say seeing is believing. May it be the history, misery as physicians, the data. However, there are many pathways, mechanisms, and the mysteries that lie in the Grey shadows of what we call knowledge and science, awaiting their discovery. Need is what drives us as the Men and women of science. A Dutch cloth trader who was in the need of observing the cloth fibers closely, has invented the most powerful microscope of his time. It is his need which drove him to make this invention. He described the cell in plants, which is a turning point in the science and biology. Today we are at cross roads of understanding Tumor cell, an astonishing perversion of normal cell and its microenvironment.

Cancer is phenomenally successful invader and colonizer in part because it exploits the very features that make us successful as a species or as an organism. Perhaps we have so much to learn from a cancer cell in terms of how to live. It has immortality and all the characters of an invader, yet it never gets acclimatizes to environment of excess and surplus richness of oxygen, it always depends on anaerobic glycolysis even in oxygen rich environment, a survival trait which, we humans can almost never achieve. This is called "Warburg effect". To keep it simple, even though it has a seven storied, luxurious house and Rolls Royce series of cars, it instead of enjoying pleasures by staying in it, always moves from place to place and eats only boiled potatoes! That's why cancer is not simply a clonal disease, but clonally evolving disease. Every generation

of cancer creates a small number of cells that is genetically different from its parents, called as “Subclones“. When a chemotherapeutic drug or the immune system attacks cancer, mutant clones that can resist the attack grow out. The fittest cancer cell survives; Cancer is thus exploiting the fundamental logic of evolution. Cancer cell lives desperately, inventively, fiercely, territorially, cannily and defensively at times, as if teaching us how to survive to confront cancer is to encounter a parallel species, one perhaps more adapted to survival than we ever are.

The question that bothers the patient is “Why me?“, the patient unable to understand and doctor unable to explain. The diagnosis of cancer – not the disease, but mere stigma of its presence – becomes a death sentence for the person. The prognosis of a person who has just been found to have pancreatic cancer is the same as the prognosis of the person with aortic stenosis who develops the first symptoms of congestive heart failure (median survival, 8 months). But the illness strips him of his identity. It dresses him in a patient's smock and assumes absolute control of his actions and a state even more invasive and paralyzing than the one cancer has left behind. Why treatment of cancer is so difficult? Answer is simple, the deception. The language of cancer is grammatical, methodical and to say frankly, is beautiful. Genes talk to genes and pathways to pathways in a perfect pitch, producing a familiar yet foreign music that rolls faster and faster into a lethal rhythm. Underneath what might seem like overwhelming diversity is a deep genetic unity. Cancer is really a pathway disease. Early chemotherapy was also erratic and experimental, like a beating the dog with a stick to get rid of its fleas. In this aspect, to say frankly, we made a tremendous progress in terms of therapy and humanitarian grounds, as today we have chemotherapy, where we can administer chemotherapy in a day care setting and even treat on Out patient basis with targeted therapies.

If somebody asks “can we get rid of cancer completely?” The answer is simple “No“. The only way to avoid cancer is not to be born. To live is to incur risk, because cancer is stitched into our genome. However, the treatment of cancer is not so pessimistic in this ultra scientific era. One such grand victory in the history of cancer was a drug called

as Gleevec (Imatinib mesylate). History of Chronic myeloid leukemia is now divided into pre gleevec era and post gleevec era. The rarely used word “CURE” in the treatment of cancer was first time used in the history of cancer, that too for a uniformly fatal disease. Today when a patient with CML is seen, he will be said that the disease is an indolent leukemia with an excellent prognosis, that he will usually live his functional life span provided he takes an oral medicine for the rest of his life

Can we fight with our own selves? Is it possible? Because cancer cell originates from our own cells, own genome. My personal opinion is that we can only understand cancer, just like we want to give a shoulder to those who are in misery. Cancer cell itself is in a miserable state struggling to survive, while we bombard it with knives, chemicals and Varieties of radiation. What we need to understand is what is that insult, what is that injury that's provoking a normal innocent cell doing its duty and want to die peacefully, to a incessant and virulent Cancer cell, that is refusing to die. Is it our life style, food, water or any component of air? The moment we understand that, this complex riddle is almost solved!

Tobacco Control In North-East India

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Trustee and Head of Tobacco Control, Sambandh Health Foundation

The Tobacco Burden

Tobacco is one of the leading causes of death and disease in the world and particularly so in the North-east India. The prevalence of tobacco usage (figure at right) in NE States is among the highest in the Country and far above the National average, with the exception of Sikkim State. What is also very alarming is that the tobacco usage among children of the age group 13-15 years, is also very high.

It is thus not surprising that cancer rates in the North-east are, as per ICMR-NCDIR study, 2021, also among the highest and the region has been called the cancer capital of India.

school to fulfil 9 criteria every academic year. This important program protects students from initiating tobacco use and even impacts teachers and parents.

- Enforcement of anti-Tobacco Laws, such as Cigarettes and Other Tobacco Products Act, 2003, which (1) prohibits smoking in public places, (2) bans advertising, promotion and sponsorship of tobacco/products, (3) prohibits sale to/by minors and within 100 yards of educational institutions and (4) prescribes pictorial pack warnings on all tobacco products.
- Cessation: setting up of tobacco cessation centres (TCCs) and providing help

NORTH-EASTERN STATES		Adults [15 years+] GATS2 (2016-17)			13-15 years GYTS 2019
Sn	State/UT	Smokers	Chewers	Overall	
	India	10.7%	21.4%	28.6%	8.5%
1	Arunachal Pradesh	22.7%	39.3%	45.5%	58.0%
2	Assam	13.3%	41.7%	48.3%	12.0%
3	Manipur	20.9%	47.7%	55.1%	20.0%
4	Meghalaya	31.6%	20.3%	47.6%	34.0%
5	Mizoram	34.4%	33.5%	58.7%	58.0%
6	Nagaland	13.2%	39.0%	43.3%	43.0%
7	Sikkim	10.9%	9.7%	17.9%	25.0%
8	Tripura	27.7%	48.0%	64.5%	7.6%

GATS = Global Adult Tobacco Survey
GYTS = Global Youth Tobacco Survey

Tobacco Control Programs

It is expected that Governments (Central and State) should be focused on tobacco control. Under the National Tobacco Control Program (NTCP), run as part of the National Health Mission, the Ministry of Health & Family Welfare (MoHFW), provides funding to the State Governments supporting the NTCP. In addition to creating awareness about the harms of tobacco, the NTCP has three main components:

- Tobacco Free Educational Institutions (ToFEI) program which requires every

to those who want to quit. The program supports setting up TCCs, among other locations, in hospitals and dental colleges.

Voice of Tobacco Victims (VoTV)

Many civil society organisations and NGOs are working in the tobacco control and one of the most famous campaigns, VoTV, is a doctors' led initiative to sensitize policy makers and enforcers about the dangers of tobacco usage, tobacco industry activities, lack of stringent action against tobacco companies and growing plight of victims across

the country. The campaign is being run by Sambandh Health Foundation (SHF), Gurugram. When launched in October 2011, it had 23 doctors as volunteers. In the last 10 years, the number of doctors has risen more 400 from 25 states across India. The doctors are volunteering their time across India. It is heartening that VoTV is led by clinicians who, apart from treating the disease, are involved in preventive care, which is generally relegated to the public health doctors/community medicine experts. Hence this campaign has proven to be a game changer in tobacco control in India. Dr Ravi Kannan, Director, Cachar Cancer Hospital, Silchar, Dr Caleb Harris, NEIGRIGHMS, Shillong and many other oncologists are the VoTV patrons in Northeast India.

ToFEI Program

Meghalaya has done an exemplary implementation of the ToFEI program. Started with a pilot in 5 districts in March 2021, the roll-out was soon extended to all 11 districts in August 21 and within one year, 10,000 schools of the State were participating (refer Chief Minister, Mr Conrad Sangma's tweet on the occasion).

Using SHF's App based digital methodology, by December 2022, more than 12,500 schools had done an average of 7.7 activities per school. Moreover, Meghalaya has trained teachers in more than 7,500 schools, on tobacco control so that the program is sustainable. The program has been done under the leadership of Mr Ram Kumar, Mission Director, National Health Mission and Dr Lana L. Nongbri, State Nodal Officer, NTCP and VoTV and VoTV doctors have played a key role during training of the thousands of teachers on ToFEI in motivating them to properly undertake the ToFEI program.

Assam has, in January 2023, launched the App based ToFEI implementation and as Dr Aftab Ali, VoTV patron, says "this program makes a huge impact and should be taken up urgently by all States in the North-east.

Enforcement of Tobacco Control Laws

The other key component required in all North-east States is the enforcement of COTPA. Meghalaya again training it's Police to vigorously enforce COTPA. People are now getting regularly fined for smoking in public areas and tobacco shops are displaying warning signs as required under COTPA.

We seek the support of all the members of the Association of Oncologists of Northeast India in this campaign and help us reduce the burden of cancer in Northeast India.

Conrad Sangma ✓
@SangmaConrad

Proud to share that 10,000 schools in the last 1 year started ToFEI (Tobacco Free Educational Institution). Meghalaya is committed to protecting children from tobacco

ToFEI=11 activities in every school
@mansukhmandviya
@MoHFW_INDIA
@reachlastmile
@RamkumarSathur1
@wahlangDonald

Tobacco Free Educational Institution (ToFEI)

Sale of tobacco products to a person below the age of 18 is prohibited under the COTPA Act, 2008

Secretary's Report



Dr. Vikas Jagtap
Secretary AONEI
Associate. Professor & Head
Deputy Medical Superintendent
Radiation Oncology, NEIGRIHMS, Shillong

Dear All,

Wishing all of you a very Happy New Year 2023.

May the New Year bring abundant happiness, joy and good health to you.

The AONEI newsletter, 'Darpan', has become a regular print to showcase the AONEI activities over a period of time. It gives me an immense pleasure that since 2015 the newsletter is regularly published. I hope that the AONEI members keep the newsletter alive by regularly providing the scientific and academic write up.

Due to the covid pandemic, the 17th Annual Conference of AONEI was held in Virtual mode during 27th and 28th January 2022. CME was also organized at Manipur in September 2022 by efforts of Dr. Thangjam Nirpendra in collaboration with Manipur Oncology Society.

As a matter of pride and prestige, AONEI also received, "Best Supporting Organization" award from Pratishruti Cancer and Palliative Trust on 11th December 2022 at Guwahati, Assam. AONEI has evolved into a very vibrant society and this evolution has also raised the expectations. This showcases the strength of our society. These events and awards were not possible without the support and trust from all the esteemed members of AONEI.

I thank each one of you for reposing faith in me as the Secretary of AONEI. I feel this is a great privilege, and a huge honor for me to get an opportunity to serve AONEI. I on behalf of our President and the entire Executive committee thank all of you for the trust bestowed upon us.

This year we are meeting again at 18th Annual Conference at Guwahati, Assam. This is after two years that we will meet physically for annual conference and I request all the members to join hands and come together to make this a memorable event.

The organizing committee has left no stone unturned to ensure that the conference turns out to be an occasion from which all of you carry back long lasting memories of not just scientific excellence but also warm hospitality. I would like to welcome you all again in this scientific event of the year 2023 and make it a grand success.

17th Annual Conference AONEI

The 17th Annual Conference of AONEI was held from 27th – 29th January 2022. Due to ongoing Covid pandemic, the conference was held over virtual platform. The conference was organized by Department of Radiation Oncology, NEIGRIHMS.

The conference mainly focused on Oesophagus, Breast Head & Neck and Colon Cancer management. The invited faculty included Dr. Prathmesh Pai (TMH, Mumbai), Dr. Sayan Paul (Apollo Kolkata), Dr. Ullas Batra (RGCI, New Delhi) & Dr. AS Ramakrishnan (Cancer Institute Adyar) along with other esteemed AONEI members. The conference received huge response with 22 abstracts and students from all over India participated in various online competitions.

The winners of competitions are as follows:

Poster session

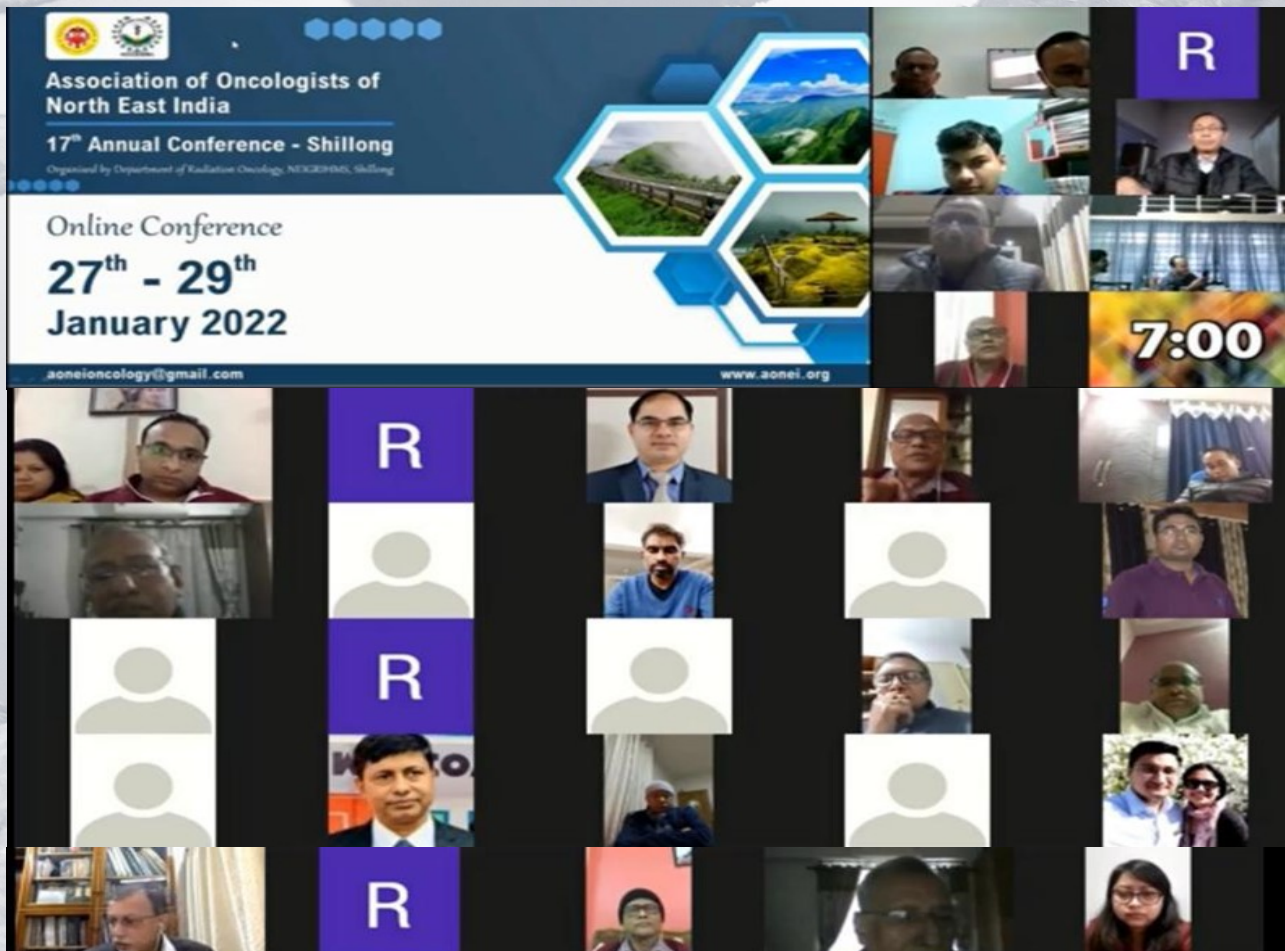
1. Dr. Megha Nandwani - Junior Consultant, Dharmasheela Narayana Superspeciality Hospital
2. Dr Dhiru Talukdar - Final year, MD Radiation Oncology, BBCI Guwahati
3. Dr. Roma Jethani - SR , Gyn Oncology, BBCI Guwahati

Special prize - case presentation

1. Dr. Apoorva Tak - Mch, Gyn Oncology, Trainee, BBCI Guwahati

Quiz session

1. Dr. Shashank Bansal - 2nd year, DM, Medical Oncology, Indore & Dr. Dhiru Talukdar
2. Dr. Chandra Sekhar Vihari - Mch, Trainee, BBCI, Guwahati & Dr. Jahnabi - SR, Radiation Oncology-SCI, Guwahati



CME on Lung and Urological malignancies

Organised by Association of Oncologist of North East India and Manipur Oncology society

Association of Oncologist of North East India and Manipur Oncology Society, jointly Organised a CME on the topic “CME on Lung cancer and Uromalignancy” on 10th September 2022. The CME was held at Hotel Classic Grande, Imphal Manipur. Eminent speakers from the state and from outside the state gave talks on the various updates on the topic.

The CME was started with a welcome address from Dr Th. Nirpendra, Radiation Oncologist JNIMS. The first session was focus on lung cancer while the second session was on uromalignancies.

In the first session, Dr Th. Bipin, Oncopathologist, NAO KON, Imphal, spoke on the recent updates on pathology of lung cancer, Dr. Irom Ibungo Singh, Associate professor, Chest Medicine, RIMS, Imphal spoke on evaluation of lung cancer. Dr S. Somorendro, Interventional Radiologist, JNIMS and Dr (Brig) AK. Dhar, Medical Oncologist, AOI, Manipur, gave talks on updates in Radiology and Medical management of lung cancer respectively.

In the second session, Dr S. Subashchandra, HOD, Department of Radiodiagnosis, RIMS, Imphal, spoke on role of imaging in Urinary bladder cancer while Dr Partha Pratim Medhi, Assistant Professor, AIIMS Guwahati, spoke on role of radiotherapy in Urinary bladder cancer. Dr R.K. Bikramjit Singh, Medical Oncologist and Managing Director, TREVI Hospital and Research Institute, Imphal spoke on update on systemic treatment of Bladder cancer.

The second session was followed by a panel discussion on the topic “Prostate Cancer”. It was moderated by Professor Y. Indibor, Senior Consultant, Radiation Oncology, KARKINOS, Imphal. The panellist for the panel discussion includes Dr. S. Subashchandra, HOD, Department of Radiodiagnosis, RIMS, Dr Prof Sinam Rajen Singh, Dept of Urology, RIMS, Dr RK. Bikramjit Singh, Medical Oncology, TREVI hospital and Research Institute, and Dr Gautam Sharma, Associate Professor, AIIMS Guwahati.

The CME was concluded by vote of thanks from Dr L. Sunil, Surgical Oncologist, TREVI hospital, Imphal.



CME on Lung and Urological malignancies

Organised by Association of Oncologist of North East India and Manipur Oncology society



AONEI gets award for Best Supporting Organization

As a matter of pride, AONEI received the prestigious “Pratishruti Award for Best Supporting Organization”. Pratishruti Cancer & Palliative Trust is already helping many cancer patients with physical, psychological and financial help along with screening program for general population. Pratishruti Cancer & Palliative Trust gave the award for the support and help extended by AONEI towards increasing cancer awareness in north east region. AONEI has conducted regular cancer awareness program in collaboration with Pratishruti and will continue to do so in future.

As a secretary of AONEI I sincerely thank Pratishruti Cancer & Palliative Trust for the honor and wishes. I also sincerely extend my gratitude towards AONEI members who took active participation to make the program successful.

Dr. Dinesh Goswami and Dr. Gautam Sarma received the award on 11th December 2022 at Guwahati on behalf of AONEI.



AONEI COMMITTEE

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