WHY DO PEOPLE USE CAM?

In my previous editorial, CAM has been labelled as “Pseudoscience” because it is not based on randomized controlled trials. It is evidence biased medicine and not evidence based medicine. Then why do people use CAM. Despite the persuasiveness, power, and promise of contemporary medical science, large segments of humanity cannot access its benefits or choose not to do so. More than 80 percent of people in developing nations can barely afford the most basic medical procedures, drugs, and vaccines. Endless varieties of practices are scientifically unproven and poorly accepted by medical authorities. In developing nations, CAM is the sole source of health care for majority. By contrast, in affluent countries, individuals select CAM approaches according to their specific beliefs. Only 1 to 2 percent of Americans use homeopathy, but 10 percent of adults use herbal medicines, 8 percent visit chiropractors, and 1 to 2 percent undergo acupuncture every year.

For many CAM practices, the only evidence of their safety and efficacy is embodied in folklore. Many people who choose herbal products in lieu of prescription medications assume that because these products are natural, they must be safe. Recent studies have shown that herbs are highly variable in quality and composition, with many marketed products containing little of the intended ingredients and containing unintended contaminants, such as heavy metals and prescription drugs. A few herbs are banned outright in several countries. Comfrey and kava have been associated with liver failure, and ephedra with heart attacks and strokes. More important, herbs contain ingredients that can accelerate or inhibit the metabolism of allopathic drugs.

Regarding the efficacy of CAM the existing body of data shows that some approaches are useless, that many the evidence is positive but weak, and only a few are highly encouraging. Although social, medical, and cultural reasons may account for why people in a given country prefer CAM over conventional (Western) medicine, economic forces are also at play. Users of CAM choose health practices that resonate with their beliefs about health. The cost of treatment using CAM is much less than the cost of accessing a conventional medical service. Evidence indicates that the cost of homeopathic medication is lower than the average cost of allopathic products. Little evidence is available on the cost-effectiveness of practices such as meditation and yoga, but the cost of acquiring the skills required for these practices, as well as the time costs of practicing them, are low relative to conventional medicine. There is a misconception that the poor are more likely to use CAM.

Furthermore, patients tend to seek care from traditional healers for conditions such as mental illness, impotence, and chronic disorders. For illnesses such as malaria or diarrhea, patients more often seek conventional treatment. One commonly cited motivation for using CAM is that their use has less side effects than with conventional treatments. In industrial countries, most CAM usage complements conventional care. Furthermore, the choice of provider depends on patients’ illness, condition, socioeconomic status, and education. If an initial visit to one kind of provider did not resolve the disease satisfactorily, a follow-up visit is made to a different kind of provider. Finally, the quality of care—including efficiency of service and waiting time at government and private clinics—is an important determinant of whether patients choose to go to traditional healers.

According to WHO, 85 percent of the world’s population (principally those in developing countries) depends on plants for medicine, and 25 percent of prescription drugs have an active ingredient derived from a flowering plant. Local knowledge and culture regarding medicinal plants may be important determinant of its use.

A number of surveys show that local pharmacies are the primary source of treatment for many ailments, especially in rural areas where government or private clinics are less accessible. In these situations, improving the quality of CAM might serve as an effective substitute for allowing the unregulated use of conventional medical treatments.

Training traditional healers is substantially less expensive than training doctors or nurses. Traditional healers can also be recruited into a more broadly based system for delivering public health; for example, with additional training, traditional healers can serve as primary health care workers and provide advice on such matters as viral fevers, cough, sexually transmitted diseases and oral rehydration therapy etc.

Comprehensive policy on CAM is lacking in most countries. The quality of herbal products is not regulated, and herbal products typically differ from source to source and from batch to batch in terms of their ingredients and respective amounts and in terms of whether they contain contaminants. No single entity is responsible for all aspects of CAM control, education, information, and research, and no national, voluntary system of self-regulation exists. Nearly all countries lack rigorous research training programs in CAM. Given that the majority of indigenous populations in developing countries use CAM for their primary health care, the availability, safety, and affordability of CAM, including herbal medicines, should be ensured as a matter of equity. In addition, rigorous research on CAM should be supported. Ineffective or unsafe herbal products identified by such studies should be removed from use, while those with proven efficacy and safety should be made available for therapeutic use. CAM programs may be integrated with conventional medicine. However, this program needs to be critically evaluated before its adoption by more health care institutions.

Efforts should be made to regulate both products and practitioners. Ultimately, stringent controls on training, practices, and products must be complemented by rigorous research to ascertain which approaches are safe and effective — and for which indications. The standards for research into CAM should be no different from those used in conventional biomedical research.

Dr. A. K. Dewan
Director - Surgical Oncology
In the bone sarcoma surgeries, achieving an adequate surgical margin is one of the most important factors for achieving a good disease-related and survival outcome. In paediatric population, future limb length discrepancy sometimes may indicate amputations or rotationplasty as better options. Due to the challenges of the surrounding anatomy, large tumor size and distance from physeal plate, a complete resection can be more challenging.

Studying a patient's anatomy with a replication of the structures gives a better comprehension compared to 2D images on a computer screen.

Here we are presenting a case of a 6 years old child with non metastatic osteosarcoma left distal femur where a customised patient specific solution was provided using 3d printing to aid in limb salvage surgery.

Surgical obstacles in skeletally immature children

Expected limb length discrepancy at maturity in a 6 year old child undergoing a limb salvage surgery using conventional tumour megaprosthesis would be nearly 14 cm. Such large LLD is itself a contraindication for LLS.

Surgical planning

In the planning stage, 3D models are used to represent the anatomy, simulate surgical procedure and test surgical tools. The distance between the tumor and physis was estimated to be 4mm from Pre NACT MRI. Considering the complex 3D anatomy around distal femur, 3D printed cutting jig was planned for taking a distal cut so as to achieve a negative surgical margin and preserve the growing physeal plate.

Intraoperative: Intraoperatively 3D printed customised surgical jigs provided supreme accuracy in preserving the distal growing physis and excised tumour bearing bone was treated with cryofreeze liquid nitrogen treatment to sterilize the tumour bearing bone. Later this liquid nitrogen treated frozen autograft was reimplanted in the defect created and stabilised using 3d printed customised patient specific titanium metal plate.

Conclusion: Use of 3D printing can improve the accuracy of resection in sarcoma surgery and thus reduce the risk of recurrence along with the benefit of preserving the growing physis and minimizing the limb length discrepancy. This is of particular use with complex resections and reconstructions. Currently published evidence principally relies on case series and basic science; therefore, going forwards, a more robust analysis of this technology and its application to the management of the surgical management of osteosarcoma is necessary.

Dr. Himanshu Rohela
Consultant – Orthopedic Oncology
RGCIRC, Delhi
Choriocarcinoma is malignant form of gestational trophoblastic neoplasia (GTN). The mainstay of treatment of choriocarcinoma is multi-agent chemotherapy. In majority of the cases, Surgery and radiotherapy have got very limited role in the management. The spinal metastases are extremely rare in choriocarcinoma. Here we present an uncommon case of Gestational Choriocarcinoma with spinal metastases leading to spinal cord compression and paraplegia which has good outcome after Surgical decompression followed by Chemotherapy.

A 23-year-old female presented to our hospital with paraplegia for two days and an episode of hemoptysis. She had history of evacuation of molar pregnancy eight months ago without any further followup. Contrast enhanced CT of chest revealed Lung metastases and MRI whole spine revealed enhancing epidural soft tissue lesion at the level of L2-L3 compressing cauda equina roots and a Large Pelvic mass. Beta HCG value was 1.2 lakh IU/L at presentation. The case was discussed in Multidisciplinary tumor board and She underwent a L2-L3 laminectomy with the removal of extradural tumor mass. Final HPE was consistent with report of choriocarcinoma. Neurological status was better with power of 3/5 in both lower limbs immediately after surgery. She was administered multi-agent chemotherapy of seven cycles of EMA-CO (etoposide, methotrexate, actinomycin D, cyclophosphamide, and vincristine) along with physical rehabilitation. Her serum β-hCG levels were normalized (<1 mIU/mL) after a total of 4 courses of EMA-CO. She received 3 more cycles of EMA-CO after normalization of β-hCG levels. The Subsequent MRI examination showed resolution of pelvic mass with postoperative changes in spine. Her neurological status consistently improved, and she is able to walk without support with good control on bladder and bowel functions at day 22 after surgery. She is presently walks without support 10 months after initial diagnosis.

**DISSCUSSION:** About 30% of choriocarcinoma are metastatic at presentation with early dissemination through hematological route, metastasizing to Lungs followed by Vagina, Brain and Liver. Metastases to spine from choriocarcinoma is extremely rare and very few reports are available in literature, and these were treated on case by case basis as there were no standard guidelines to treat such cases.

In a typical case of Gestational Choriocarcinoma, the standard management of patients with high risk is multiagent chemotherapy EMA-CO. Surgery has a very limited role except in Isolated brain metastases or to control Gastrointestinal bleeding. In previously reported cases, choriocarcinoma with spinal metastasis was treated with multiagent chemotherapy with radiation. Naito et al. in 2009 reportedly treated first case of choriocarcinoma with spinal metastasis successfully with multiagent chemotherapy and surgery. In our case, surgery was done to relieve the pressure and in view of possibility of improvement in Neurological status. The main concern about surgery in Choriocarcinomas are highly vascularity of tumors and possibility of torrential hemorrhage which can be controlled by preoperative tumor vessel embolization. In our case also, intraoperative hemostasis was quite challenging and needed blood transfusions. 10 months after completion of treatment our patient is able to walk without support and has full bladder and bowel control. The main reason to report this case is to highlight the fact that despite the delayed presentation with paraplegia, this patient had excellent outcome. Surgery may find a role in spinal metastasis in oncologic emergencies even in most chemo sensitive tumors like choriocarcinoma.

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<th>Pretreatment image (computer resolution)</th>
<th>Post treatment image (computer resolution)</th>
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Dr. Manish Sharma
Consultant – Medical Oncology
RGCIRC, Niti Bagh
PUBLIC LECTURE ON YOUR ENVIRONMENT AND CANCER

Continuing our efforts in making people aware of cancer, on the occasion of Silver Jubilee Celebrations, RGCIRC organized the public lecture series on Monday, 16th August 2021 through Zoom. Dr. Anurag Mehta, Director – Laboratory, Transfusion Services and Research, RGCIRC delivered opening remarks. Dr. Gauri Kapoor, Medical Director – RGCIRC, Niti Bagh, South Delhi & Director - Pediatric Hematology Oncology delivered awareness lecture on Your Environment and Cancer. The session / lecture was moderated by Dr. Kundan Singh Chufal, Sr. Consultant - Radiation Oncology, RGCIRC. The lecture was attended by more than 350 people and very well appreciated by the gathering.

PUBLIC LECTURES FOR SILVER JUBILEE CELEBRATION OF RGCIRC

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Time of Lecture - 02:00pm to 03:00pm

For more information; please contact @ +91- 11- 4702 2144 | Email: rgcirc@events@gmail.com

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