

The Curriculum of Medical Teaching in Egypt Needs Updating

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Introduction

The purpose of this article is to concentrate on a few medical topics, in which Complementary and Alternative Medicine (CAM) has been applied in several European Countries as well as in the US. Only those in which the author has personal experience will be described:

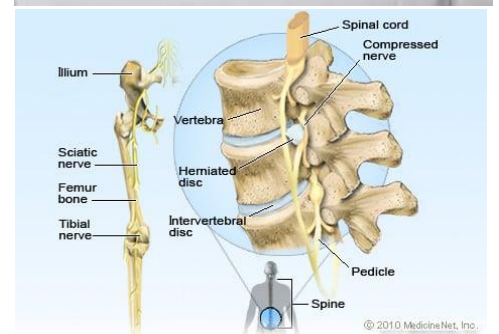
1. **Chiropractic**
2. **Zone Therapy (Reflexology)**
3. **Knee Problems (Osteoarthritis)**
4. **Hip joint problems (Arthritis)**
5. **Prostate Cancer (Adenocarcinoma of the prostate)**

Each one of these topics will be briefly discussed. The description of the CAM treatment methods will be restricted to those methods which have sound scientific bases and results. After summarizing these methods, there will be a conclusion, and suggestions for the recommended steps to be followed by Alexandria University for updating the Medical School Curriculum.

1. Chiropractic¹⁾

Chiropractic is a system of complementary medicine based on the diagnosis and manipulative treatment of misalignments of the joints, especially those of the spinal column, which are believed to cause other disorders by affecting the nerves, muscles, and organs²⁾. Chiropractors are normally educated in human anatomy, physiology, radiographic analysis and treatment protocols. Several surgeons and MDs in Europe and US are qualified to offer chiropractic services. They recognize when one will and will not benefit from the chiropractic care, recommend other treatment, before taking any actions for a surgery.

I have personal successful experiences with Chiropractors. The first time was when I suffered from a disc slip/had a herniated disc following a tuff tennis match. The Chiropractor was a professor in Helsinki University and a surgeon. He managed to free up the vertebra and restore motion, thus fixing the disc slip in few minutes. The plausible and may be sad thing at the same time, is the fact that a primitive form of the Chiropractic was known and practiced in Egypt for ages by the “Megabbaraty”, but no one thought to study it, develop it and include it into medical treatment.



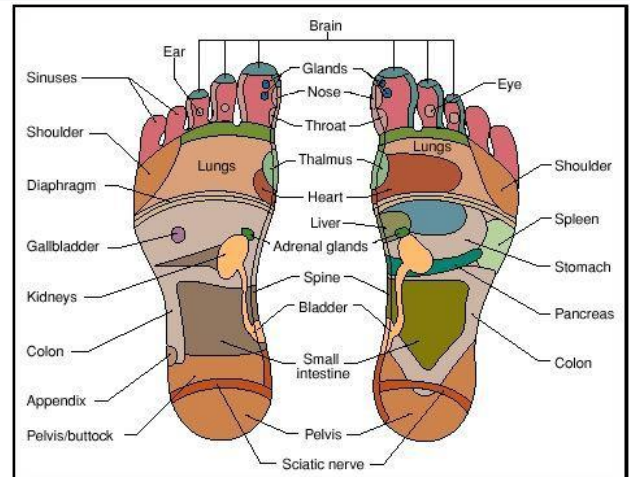
*) Dr. ElMahgary obtained his B.Sc. & Eng. from Alexandria University with Honor. He undertook post-graduate studies in Moscow Power Inst. And Helsinki Univ. of Tech. towards the Lice. Tech. and Dr. Tech. degrees. He worked as Senior Research Engineer, Team leader and Studies Director in the Technical Research Centre of Finland for 25 years, Professor of UNESCO Chair in Environment in Alexandria University, Prof. Emeritus in Egypt-Japan Univ. of Science & Tech. (E-JUST), Chief of the Energy Section of UNEP and CTA of several UN projects in Energy & Environment in Asia, the Pacific and South America, and of other bi-lateral projects between Finland, Egypt and other Arab Countries. He published over 200 articles, papers and research reports.

2. Zone Therapy (Reflexology)

A surprising fact is that Zone therapy/Reflexology was practiced in Egypt 4000 years ago, as depicted in the tomb of Ankmahon³⁾! In the 20 Century Reflexology was introduced into the US by W. H. Fitzgerald MD (1913). Now Reflexology Institutes spread throughout Europe and US, and you can find Zone therapists/ Reflexologist almost in every European city⁴⁾, but not yet in Egypt, where it was born!

However, some MDs still have difficulties with it. The medical journal *Maturitas*⁵⁾ published a systematic review in 2010, which showed that Eight RCTs (randomized clinical trials) suggested that reflexology

is effective for the following conditions: diabetes, premenstrual syndrome, cancer patients, multiple sclerosis, symptomatic idiopathic detrusor over-activity and dementia yet important caveats remain. However, they concluded saying that best clinical evidence does not demonstrate convincingly reflexology to be an effective treatment for any medical condition! The reason in my opinion is that they were unable to explain scientifically how it works. Reflexology is categorized as a Complementary/Alternative Treatment, which helps to reduce pain levels in the body according to the neuromatrix theory of pain that describes pain as a subjective experience created by the brain. The brain does this in response to not only physical stimuli but also in response to emotional or cognitive factors. Reflexology is gentle manipulation or pressing on certain parts of the foot to produce an effect elsewhere in the body. I have a positive personal experience also with Reflexology. After visiting the reflexologist a few times, I said farewell forever to hay fever and to antihistamine medications.



3. Knee Problems (Osteoarthritis)

Being active in sports, as tennis and football could cause serious knee problems, as erosion of the meniscus, or even breaking of the cartridge and exposing the damaged bone. Orthopedists often suggest in these cases joint replacement using an artificial knee, but fortunately not all of them. I found one in Finland, who didn't mention anything about knee operation. He recommended exercises to strengthen the thigh muscles, one to be done at home and the other in the Gym. After doing these exercises every day for the last 20 years, I never regretted that I didn't make the knee operation.

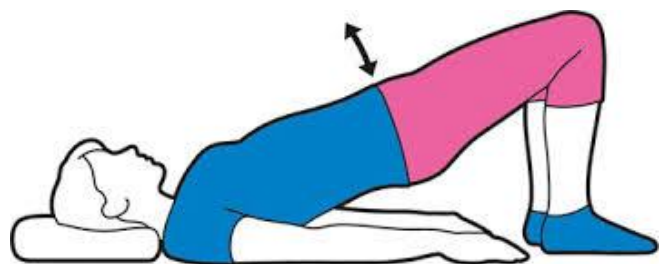
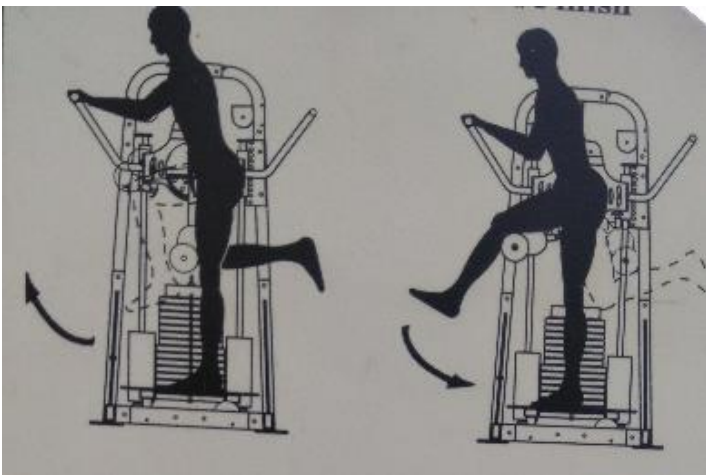
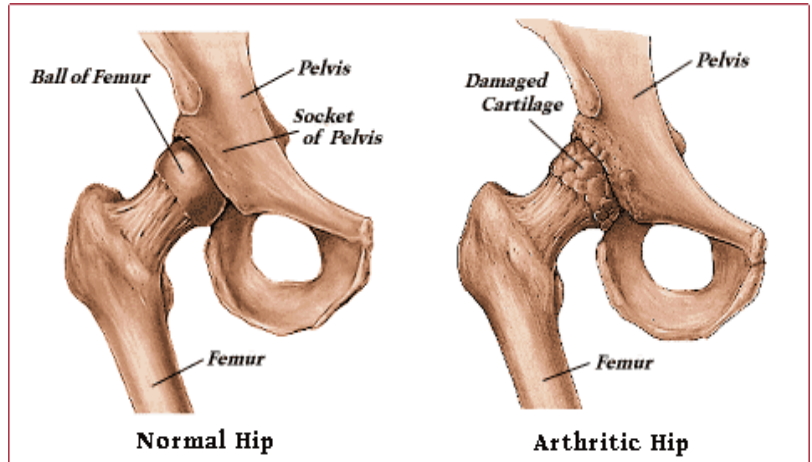


4. Hip joint problems (Arthritis)

Arthritis of the hip is a condition in which there is loss of the cartilage of the head of the thighbone and of the cup-shaped socket of the pelvis where the thighbone fits into the joint (the acetabulum). This cartilage allows the bone to glide inside the socket of the joint as one moves. There are several reasons of arthritis as obesity, excessive sport activity, advancing age and others as sitting for long time on unhealthy chair (a). There are also different ways of dealing with arthritis: anti-inflammatory medication as ibuprofen, corticosteroids injections to block the inflammation in the joint, physical therapy or exercise programs to improve flexibility and build up strength and maintain muscle tone, and finally osteotomy surgery or total replacement if the hip joint is severely damaged⁶⁾.

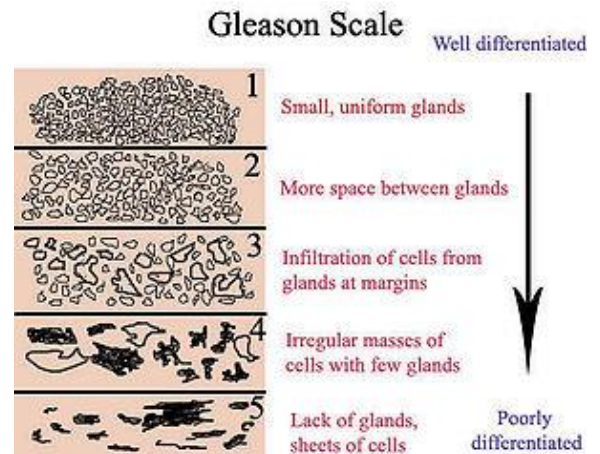
I happened to be familiar with the case of my MD eldest brother, who had chronic problems with his hip joint. He had to make total replacement surgery in Canada. His ability to walk improved a lot, but he suffered severe pains when the femur slipped couple of times out of the pelvis socket. Clearly, because of the absence of iliofemoral ligament, which the operation could not sustain.

Hence, when I had the symptoms and the diagnose, I took a short cut and went directly for CAM. The first step was to change the unhealthy chair (a) into a healthier one (b), and use flexible office chair. Second, to start physical exercises. There are several exercises that could be recommended. The pictures below show one exercise that could be done at home and another one for the Gym.



5. Prostate Cancer (Adenocarcinoma of the prostate)

The last case will be devoted to prostate cancer. Roughly ten years ago, I ran into an essay entitled “Let Cancer Starve”. It was published in Johns Hopkins Cancer Updates (Johns Hopkins 2012)⁷⁾, who spent more than thirty years of his life treating cancer patients with classic methods; operation, radiotherapy and chemotherapy. The two main points which I grab from his essay were: (a) **Sugar, is a cancer-feeder**. By cutting off sugar it cuts off one important food supply to the cancer cells. (b) **Cancer cells thrive in an acid environment**. A meat-based diet is acidic and it is best to eat fish, a little chicken and a lot of vegetables and fruits.



A few years after, I had a biopsy both in Egypt and Finland that. Both showed that I had tumor. The final diagnosis was **Gleason pattern 3 + 3, score 6**. When the Oncologist saw this with an PSA 34ng/ml, he ordered blood analysis and bone scan, which both were negative. He suggested hormone treatment and selected Casodex (bicalutamide) 50mg. When I investigated its side effects (Annex 1), I was horrified. I couldn't stand the idea of fixing one organ and possibly destroying others. Thus, I gave up the idea of using that drug. I remembered John Hopkins recommendations. I found them more convincing than the radiotherapy suggested by the urologists and oncologists from Egypt and Finland, which would have costed me over euro20,000, if I did it in Finland. Cutting sugar means that one has to cut also carbohydrates, as the digestive system converts **carbohydrates into blood sugar (glucose)**. I followed that diet together with Antioxidants, Physical Training and Oxygen therapy for about six months. When I made the biopsy after that in Finland, the result was negative. The Finnish Urologist, who was amazed by the results, suggested Avodart (Dutasteride) for BPE and later Duodart (Dutasteride and tamsulosin). I took Avodart for few months. I also bought Duodart with over euro100, but I never took it after reading its side effects.

Shortly after that I came across an article on the Origin, Management, and Prevention of Cancer, by T. Sayfried 2015⁸⁾. He mentioned the important finding that Cancer is a Metabolic and not a Genetic disease. This fact is unfortunately overlooked and cannot yet be perceived by the majority of the oncologists, who are still treating cancer with the traditional old methods, assuming that it is a genetic disease. For the last six years, I have been following, not strictly but with success, a diet based on what Johns Hopkins and T. Sayfried suggested⁹⁾.

Conclusion and Recommendation

In this paper we considered only five types of Complementary and Alternative Medicine (CAM). Other types exist like Acupuncture and Homeopathy. These in addition to Dietary Supplement and Dietary Medicine. Until the forties of last century, students from Japan and other Asian and European countries used to come to Egypt to study medicine. This has almost stopped in the fifties. In the sixties Egyptian MDs started going to UK and US to obtain FRSC and other certificates. The question is: is it possible to change the tide again, even partially? In my opinion it is possible. More than that, Alexandria University could take the lead in this respect. The key word is Complementary and Alternative Medicine (CAM), which several of its branches and applications saw the light in Egypt. The steps recommended are as follows:

1. Contacting Universities known with their experience and interest in CAM, e.g., Lappeenranta University and Metropolitan University of Helsinki, Finland.
 2. Contacting UNESCO, Paris/ UNESCO Regional Office in Cairo, informing that Alexandria University wishes to establish UNESCO Chair in CAM in cooperation with the two Universities mentioned above.
 3. Preparing a project document including, among others, the selection of a professor from Finland for UNESCO Chair, training of teaching staff from Alexandria University in Finland and undertaking study tours of the students of CAM in Finland.
 4. Contacting the Government of Finland, in cooperation with the two Universities mentioned above, to provide funds to the project and present the project document to the Ambassador of Finland in Egypt.
 5. Praying that the project gets the funds needed!
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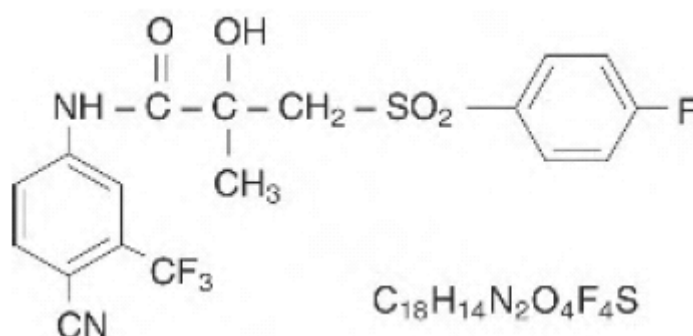
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Annex 1

Casodex Side Effects

CASODEX® (bicalutamide) Tablets contain 50 mg of bicalutamide, a non-steroidal [androgen receptor](#) inhibitor with no other known [endocrine](#) activity. The chemical name is propanamide, N [4 cyano-3-(trifluoromethyl)phenyl]-3-[(4-fluorophenyl)sulfonyl]-2-hydroxy-2-methyl-,(+). The structural and [empirical](#) formulas are:



Bicalutamide has a molecular weight of 430.37. The pKa' is approximately 12. Bicalutamide is a fine white to off white powder which is practically insoluble in water at 37°C (5 mg per 1000 mL), slightly soluble in [chloroform](#) and absolute ethanol, sparingly soluble in methanol, and soluble in [acetone](#) and tetrahydrofuran.

CASODEX (bicalutamide) is a racemate with its antiandrogenic activity being almost exclusively exhibited by the R-enantiomer of bicalutamide; the S-enantiomer is essentially inactive.

The inactive ingredients of CASODEX (bicalutamide) Tablets are [lactose](#), [magnesium](#) stearate, hypromellose, polyethylene glycol, polyvidone, [sodium](#) starch glycollate, and titanium dioxide.

What are the possible side effects of bicalutamide (Casodex)?

Get emergency medical help if you have any of these **signs of an allergic reaction**: hives; difficult breathing; swelling of your face, lips, tongue, or throat.

Call your doctor at once if you have a serious side effect such as:

- chest pain, cough or trouble breathing;
- feeling short of breath, even with mild exertion;
- swelling in your hands or feet;
- fever, chills, body aches, flu symptoms;
- pale skin, easy bruising or bleeding;
- blood in your urine; or
- nausea, pain in your upper stomach, itching, dark urine, clay-colored...

Casodex Consumer (continued)

SIDE EFFECTS: Flushing and sweating (hot flashes), body aches and pains, breast swelling/tenderness/pain, headache, dizziness, drowsiness, trouble sleeping, weakness, hair loss, weight changes, constipation, diarrhea, stomach upset, gas, nausea, vomiting, and loss of appetite may occur.

Remember that your doctor has prescribed this medication because he or she has judged that the benefit to you is greater than the risk of side effects. Many people using this medication do not have serious side effects.

Tell your doctor immediately if any of these unlikely but serious side effects occur: decreased sexual ability/desire, vision changes, numbness/tingling of the hands or feet, swelling of the arms/legs, unusual or easy bleeding/bruising, change in the amount of urine, painful urination, signs of infection (e.g., fever, chills, persistent sore throat), trouble breathing, persistent cough, mental/mood changes (e.g., anxiety, depression).

Seek immediate medical attention if any of these very serious side effects occur: chest pain, jaw/left arm pain.

Rarely, bicalutamide may cause growth of other types of tumors. Consult your doctor immediately if new lumps or growths occur.

This medication may rarely cause serious (possibly fatal) liver disease. Seek immediate medical attention if any of these side effects occur: dark urine, yellowing of the eyes/skin, unusual tiredness, severe stomach/abdominal pain, persistent nausea/vomiting.

A very serious allergic reaction to this drug is unlikely, but seek immediate medical attention if it occurs. Symptoms of a serious allergic reaction may include: rash, itching/swelling (especially of the face/tongue/throat), severe dizziness, trouble breathing.

This is not a complete list of possible side effects. If you notice other effects not listed above, contact your doctor or pharmacist.