Unani approach to cancer (Sartan) and its management

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Abstract
Sartan (سرطان) is an Arabic word which means crab and literally used for cancer. The term cancer represents a group of diseases, about 200 tumours recognises abnormal cellular proliferation (neoplasm). Hippocrates used the terms carcinos and carcinoma to describe non-ulcer forming and ulcer-forming tumours. Since antiquity Sartan has been considered to be a dreadful disease and a big enemy of human beings. According Unani Philosophy Sartan occurs due to abnormal sauda (especially Sauda mirrah), and it can occur in any part of the body. This article attempts to explore the metaphors of cancer from the Unani texts with reference to the scholars of Unani system of medicines like Hippocrates, Galen, Raizi, Majoosi, Ibn Sina and Ismail Jurjani etc.

Keywords: Sartan, cancer, crab, abnormal Sauda, Sauda Mirrah (سودا مرَّه

Introduction
Cancer (Sartan) is a hyperproliferative disorder that involves transformation, dysregulation of apoptosis, proliferation, invasion, angiogenesis and metastasis of cells [1]. It is a leading cause of death worldwide, accounting for 8.8 million deaths in 2015, associated with cancer of lungs (1.69 million deaths), liver (788 000 deaths), colorectal (774 000 deaths), stomach (754 000 deaths) and breast (571 000 deaths) [1]. Sartan is an Arabic word which means crab and literally used for cancer [1]. Cancer, is a Greek word which stand for crab, it is one of the most dreaded diseases since ancient times. The following observation indicates that the knowledge of the disease existed in the Unani (Graco-Arabian) system of medicine. Galen stated that “as a crab is furnished with claws on both sides of the body, so it is the disease. The veins extended from the growth giving it shapes much like of a crab” [4]. Unani scholar’s correlates cancer with crab and the way how crab holds with its limbs, similarly the disease is, so it can’t be separated easily [5].

Cancer as defined by Eminent Unani Scholars
Unani Physicians defined Sartan (cancer) is a saudavi warm (melanotic swelling), occurs due to the combustion of either safra (yellow bile) or both Balgham (phlegm) and safra (yellow bile) in the body [6]. It stars like an almond and grows to round or irregular in shape with reddish colour along with blue or black streaks, which resembles like the limbs and the middle part like abdomen of crab [5,7].

The word “cancer” originated from ‘cancrum’ which is a Greek word for Crab [8] and it is credited to the Greek physician Hippocrates (460-370 BC). Hippocrates used the terms carcinos and carcinoma to describe non-ulcer forming and ulcer-forming tumours. In Greek, these words, most likely applied to the disease because the finger-like spreading projections from a cancer called to mind the shape of a crab [9]. The Roman physician, Celsus (28-50 BC), later translated the Greek term into cancer, the Latin word for crab. Galen (130-200 AD) Roman physician, used the word oncos (Greek for swelling) to describe tumors. Although, the crab analogy of Hippocrates and Celsus are still in use to describe malignant tumors [10].

Historical Background of Sartan
The Oldest description of cancer was found in Egypt, which dates back to 3000 BC [11]. It describes 8 cases of tumors or ulcers of the breast that was removed by cautery with a tool called the fire drill. The classical papyrus describes that for cancer there is no treatment [9].
Aetiopathology of Sartan
In Unani System of Medicine cancer is equated by ‘Sartan’, Amraz-e-Saudavia i.e. disease of black bile (especially Sauda Mirrah) and Amraz-e-Khabeesa (chronic and dangerous disease) [6]. The cause and development of cancer are multifactorial i.e. excess production and abnormal changes occur in sauda. There are five types of abnormal sauda- excess production of normal sauda, burning of normal sauda to abnormal sauda, formation of sauda due to burning of blood, formation of sauda due to burning of phlegm and formation of sauda due to burning of safra (bile) i.e. Sauda Mirrah [3, 12] and some of the dietary substances like Masoor Dal, Brinjal, Qan’beet (cauliflower), older age wild animal meat, Beaf, Black wine) [13, 14].

Sites of sartan according to classical unani text
Sartan mostly occurs in hollow organ or Aza-e- Ratab like Breast (pistan), Uterus (raham), Throat (halaq), Respiratory System (aalam tanaffus), Intestine (aam), Urethra (ahleel), Mouth (Dahan), Nerves (Asab), Eyes (Ain), Neck (Unq) [12, 13, 15, 16].

Prevalence of Sartan
According to the authors of Al-Havi, Ghina Muna, and Moalajat-e- Buqratiya females are more affected from cancer, as because their bodies are flabby and susceptible to accept the vicious matter (Ghaleez madda) [14, 17, 19].

Concept of Metastasis in USM
Antelash, Zakariya Rhazi, Ibn-Sina and Ismail Jurjani, refer a case of one sided breast cancer in a women that had been completely removed, later they knew that cancer had been developed in the other breast, it was believed that (Antyllus and Ibn Sina) it occurs due to metastasis of sauda mirrah on the other breast [14, 19, 20].

Treatment and prevention of sartan by eminent scholars
In Unani System of Medicine a numbers of great scholars from Galen (131-210 AD), Zakaria Al-Razi (865-925 AD), Ali-Ibn Abbas Majusi (930-999 A.D), Al-Zahravi (939-1013 AD), Ibn-Sina (980-1037 AD), and Al-Karaki (1233-1286 AD) etc, paid their attention towards the treatment and prevention of cancers [6].

The treatment described in Unani text includes: (a) Drugs- Plants origin, Mineral origin and animal origins (single/compound forms) and (b) Surgical & other measures (Diet therapy, Amle Kai, Riyazat, Nutool, Hammam etc) [4, 15]. In this communication, the herbal drugs used by great scholars- Al-Razi recommended 131 plants and Ibn -Sina 55 for the cure of cancer. There are 36 common plants distributed over 27 families, which have been used by both Al-Razi and Ibn-Sina highlighting the parts used and important properties of the drugs mentioned by Ahmed J, et al. [6].

Treatment (Ilaj)
Author of Kitab Al-Umdah Fil-Jarahat (volume -2) by Aminuddaula Abu Faraj Ibn Al-Quf Masihni noted that with reference to “Fasool-e-Buqratiya” part-6 Book, that it is better to leave latent and asymptomatic cancers untreated in order to prolong patient’s life. Intervention in these cases may increase the risk precarious death. Latent cancer in this context refers to non- ulcerative cancers and cancers of internal organs and viscera [5].

Rhazes describes that internal cancers are not treatable; if treated, it could accelerate death of patient. I have observed cases with palate, anal or vaginal cancers in which surgery and wound cautereization prevented wound healing and caused patient’s torment till death. Apparently, if these patients were left untreated, they would have a longer life and would not have undergone treatment related torments.” [15].

Usool Ilaj (Principle of treatment):
The principle of treatment in cancer management is to regaining the humoral balances, with the help of Islah-e-Jigar and mizaj (temperament), this can be achieved through regimens like laxatives, purgatives, bloodletting, emetics, diuretics and enemas, so as to rid out of the excess and morbidity humours from the body.

Prevention of cancer can be best achieved through balanced diet (qualitative and quantitatively) and adequate exercise. Unani physicians emphasized that physis / nature (tabiyat) is the best healer and physician’s job to help the physis / nature in healing [15].

Unani Physicians recommended following usool-e-ilaj (Principle of treatment) in given successive steps:
1. Fasad (Venesection) of varaeed akhal (Median Cubital Vein) [13].
2. Tanqiyat mawad (Evacuation of morbid humours) from the body with munzijate sauda (concoction of black bile) & mushilate sauda (purgation of black bile). This purgative therapy should be given 10 times a week, till the symptoms disappear [15].
3. Munzijate sauda drugs are- Bisfaij (Polypodium vulgare), Ustukhuddus (Lavendula stoechas), Parshiyonsan (Adiantum capillus), Gaozaban (Borago officinalis), Badrajboya (Mellisa officinalis), Asllusus (Glycerrhiza glabra), Badyan (Foeniculum vulgare), Unnab (Zizyphus sativa), Shaitara (Fumaria officinalis), Sapistan (Cordia latifolia).
4. Mushilate Sauda drugs are- Aftimoon (Cascata reflexa), Shahamanzal (Citrullus colocynthis), Elva (Aloe barbadensis), Halaia Siyah (Terminalia chebula), Turbud (Ipomea turpethum), Badrajboya (Melissa officinalis), Barge Sena (Cassia angustifolia), Ghariqoon (Agarcus alba), with shikanjabeen & maul ash (honey water), Non-irritative neutral resolvent (Moatadil mohallilat) likeKasni (Cichorium intybus), Marzanjosh (Origanum vulgare), Baranjasil (Artemesia vulgare), Baboona (Matricaria chamomilla), Hayylul Aalam/Sadabahar (Vinca rosea).
5. Dietary regimen (consume wet, soft and cool foods capable of attenuating black bile-induced burning)-Diet should be jaiyyadul kaimus, ghizae latif & reduce the excess productin & accumulation of sauda and also made to cool and refresh the body, like- Kaddu (Cucurbita maxima), Khurfa (Portulacca oleracea), Cholai/Lal Saag (Amaranthus pungyamus), Bathua (Chenopodium album), little fishes, Kheere (Cacumis sativus), Qisa (Cacumis melo), Maul Juhn (cheese whey), Mauss-Shaer (water of Hordeum vulgare), Nabeex (Arishi) [10, 17, 19].
6. Pain associated with cancer can also controlled with oral administration of ash of tootiya (Copper sulphate) mixed with milk [19].
7. Local medication for cancer- Ibn-Sina describe in his book Al-Qanon, there are four purpose to such
treatment;

a. Total arrest of the cancer
b. Preventing its progress
c. Preventing ulceration
d. Treatment of ulceration. For the healing purpose for the ulcer Unani physician recommended zinc oxide mixed with essential oil of rose and other flowers and also mentioned “Marhame Aksheer.” [3, 15, 16, 19, 20, 21, 22, 23]

Conclusion
Since antiquity cancer has been considered as a dreaded disease, the physicians of Unani system of medicine were well aware of cancer (Sartan), and its causes, course of disease and management. The insight of Rhazes equates the conventional thinking about the treatment of cancer. The classical texts of Unani can be proved to be a source of wisdom for exploring the effects of the understanding the disease and its management.

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References: