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Unani perspective and recent studies on *Sartan-e-Sadi* (Breast cancer)

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REVIEW ARTICLE

ABSTRACT

Cancer is a significant global healthcare problem with an estimated worldwide incidence of 10 million new cases per year and morbidity is high with > 7 millions death per year. Among that breast cancer is a major public health challenge is often associated with high morbidity. The goal of carcinoma treatment is first to eradicate the cancer. In last two decades the treatment options for cancer are advances but those therapies have its own hazards. But now the world turned to an alternative system to defeat the situation by utilization of herbs. The Unani eminent physicians like Ibn Sina and Al Razi claimed most type of cancers and its treatment based on the herbs, which are can be correlated with cytotoxicity, antioxidant, immune modulators and apoptosis actions and these herbs are safest and easily available. Therefore the aim of this review is to embrace information about *Sartan e Sadi* (Breast Cancer) in Unani system of medicine to validate our eminent Unani physicians' claims.

Keywords: Cancer, breast carcinoma, cytotoxicity, antioxidant, immunomodulators, *Sartan-e-sadi*.

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INTRODUCTION

Cancer is leading cause of death worldwide. Statistics indicated that cancer strikes more than one third of the population and it is the cause of more than 20% of all deaths (Toni, 2010). The WHO has estimated that about 15 million new cancer cases will be diagnosed each year by 2020 worldwide (Munjal, 2012). Among that breast cancer (BC) is the most common cancer among throughout the world (Akabari ME 2007). The incidence rate of BC is growing during the last 40 years (Harirchi, 2000). The incidence rate is 21.42 end the age specific rate (ASR) is 25/100,000 female population (Nahid, 2012).

The treatment of BC has its strength and weakness. Current optional anticancer therapies are associated with adverse effects, drug resistance and cancer recurrence. There is a great need to combat this

disease with better and more effective medications as compared to existing therapies. In Unani system of medicine BC described under the heading of '*Sartan e Sadi*' or '*Sartan e Pistan*'. But the new cancer therapies with low toxicity and minimal side effects are mentioned in Unani classical texts.

The Unani physicians have mentioned about *sartan e sadi* concept, *alamath* (sign and symptoms), prevention and its management. Therefore, the aim of this article is to provide comprehensive information on ancient physiological concept of *Sartan e sadi* present in Unani System of Medicine and herbs which can be used in breast cancer to update the current knowledge and to promote the research in these herbs which are not proved scientifically.

Unani perspective of breast cancer

Cancer is known as 'Sartan' in Unani system of medicine. According to Unani medicine, cancer is due to *sawda* (black bile) and *sawdawi mada* develop into two as; *tabayee mada sawda* (normal black bile) which develop as *warm e sulb* (hard swelling) and if the *tabayee mada sawda* develops burning it causes *sartan* (Kitaabul Umdah).

The eminent Unani physicians like; Jalinoos, Al Razi, Al Zahrawi and Ibn Sina have been explained their precious book about *sartan* and its treatments.

Al Zahrawi was the first to perform the classical removal of *sartan e sadi* (Saad, 2008). According to Rabban Tabri *sartan* develops in *aza e mutkhalkhaka* (hollow organs) (Tabri, 1997). When *sawda* becomes *enteraqi* (oxidation) which act as a precursor of formation of *sartan* (Zakaria, 2002). Further it may be due to excess use of *garam muhallilath* (hot anti-inflammatory drugs) in case of *warm e sawdawi* (black bile inflammation) diseases in *rehm* (uterus) (Tabri, 1997).

Alamath (Sign and Symptoms)

- Presence of hard mass on breast
- Colour of skin becomes reddish, blackish and hard.
- Burning and pricking sensation in breast (Zakaria, 2002).

Management

Prevention

- The body should be de-toxified from *sawdawi mada*.
- Prevention from *garam va husk* (hot and dry) producing *ghiza* (food).
- Avoidance of alcohol, stress and environmental pollution.

Ilaj (Treatment)

Treatment of *sartan e sadi* is based on four modalities which mentioned in the classical Unani literature, Viz;

1. *Ilaj bil Ghiza* (Dietotherapy)
2. *Ilaj bil Dawa* (Pharmacotherapy)

3. *Ilaj bil Tadbeer* (Regimenal therapy)

4. *Ilaj bil Yad* (Surgery)

Ilaj bil Ghiza (Dietotherapy)

- Ibn Sina explained the effect of diet on cancer progression. He explained that, prevention of cancer progression by, improving the diet and reinforcing the involved organ (Hilal, 2010)
- Dietary inclusion of beans, cruciferous vegetables are important. Eg: *mongi dhal* (green gram), *badam*(almond), *akhrot* (wall nut)
- Diet should be *latif ghiza* (easily digestible food) and prevention of accumulation of *sawda* production and cooling are important. Eg: *Kaddu Khurfa*, *Kheera*, *Maul Jubn*, *Maul shaer Nabeez* (Zakaria, 2002 & Ibn-Sina, 2010).

Ilaj bil Tadbeer (Regimenal therapy)

- Regular exercise and proper rest are important factors.
- According to Ibn Sina's concept; "be preceded by purifying (clearing) the body of the bad material (black bile) by *mushilath* (purgation), *hijamah* (cupping) and maintain the body by qualitatively and quantitatively to strengthening the defense (resistance) of the involved organ".
- To remove *sawdawi mada*; performing *fasad* (venesection) on *vareede akhal* (cubital vein) is good. But it is restricted to metastasis cases (Zakaria, 2002)

Ilaj bil Dawa (Pharmacotherapy)

- For *munsij* (mature) the *mada*; give *ushar e sahatira* for 3 days then give *mushilath* (purgatives) as *joshanda e afthimoon* and *seno* for 7 days.
- Further as a *munsij* following *dawa* can be used;

Bisfajj, *Ustukhuddus*, *Badrajboya* *Asalusoos Unnab*, *Shahtara*, *Sapistan* Hkm. Akbar Arzani (2002) & Abu Al-Mansurul (2008).

- As a mushilat e sawda following dawa can be given;

Aftmoon, Elva, Halela Siyah, Ghariqoon, with shikanjabeen and maul asl (honey water) (Hilal, 2010)

Then use; *thahleel warm zimad* (anti inflammatory paste) (Hilal, 2010).

Prescription –I

Barg e makko sabz-2 tola

Barg e kishneez-2 tola

Barg e soya-2 tola

Barg e kithmi-2 tola

Posht e kashkash-2 tola mix with *roghan e gul-2 tola* and apply with luke warm on affected breast (Zakaria, 2002).

Prescription –II

Apply *barg e sudab* paste on affected breast.

- Orally following *dawa* (medicine) can be given;
- *Mazu, baqla, sulaika, charbi* mixed with *sharab* keep 20 days then heat to soften the hard swellings (Zakaria, 2002).

Ilaj bil Yad (Surgery)

The Arab physicians including AL Razi, Al Zahrawi and Ibn Sina explained that a cure is most likely if the cancer was identified at its earliest stage (Zaid, 2010). To prevent the further growth, they suggested the surgical removal if the tumor was small and accessible (Sledge Jr GW 2002). The wound after excision can be kept as such for free flow of blood it immediately cauterized (Zakaria, 2002).

There are lot of herbs mentioned in Unani classical books which posses anti-cancerous activity and scientifically proven to validated our Unani physicians as follows;

Botanical Name	Unani Tibbi Name	Type of cancer	Authors
<i>Nigella sativa</i>	Kalonji	Breast cancer	Gali-Muhtasib et al., 2004.
<i>Curcuma longa</i>	Haldi	Liver, pancreatic, colon, breast, ovary carcinomas	Aggarwal et al., 2004; LoTempio et al., 2005.
<i>Aloe vera</i>	Elva	human neuroecto dermal tumors	Teresa et al., 2000
<i>Withania somnifera</i>	Asgandh	Colon cancer, fibrosarcoma	Muralikrishnan, et al., 2010; Kaileh et al., 2007.
<i>Allium sativum</i>	Lehzan	Prostate cancer	Galeone et al 2006.
<i>Glycyrrhiza galbra</i>	Aslussoos	Prostate cancer	Fuy et al., 2004.
<i>Zingiber officinale</i>	Adrak	Ovarian cancer	Rhode et al., 2007.
<i>Corcus sativus</i>	Zafran	Gastric cancer	Williams, 2013.
<i>Emblca officinalis</i>	Amla	Leukaemia	Luo W et al., 2011.
<i>Vitis vinefera</i>	Angoor	Breast cancer, Prostate cancer	Zahra et al., 2013
<i>Alpinia galanga</i>	Khulanjan	Breast adeno carcinoma	Aswiyanti et al., 2016.
<i>Saussurea lapa</i>	Qust	Leukemia	Lee et al., 2001.
<i>Trigonella foenum</i>	Methi	Breast cancer	Alkaabi, 2005.
<i>Semecarpus anacardium</i> L.	Baladur	Leukemia	Nair, 2009.
<i>Bauhinia variegata</i> (L.)	Kachnar	Ovary, prostate, leukemia, breast lungs cancers	Mishra, 2003.

CONCLUSION

Unani medicine is a holistic approach to cancer care. Unani herbal drugs can be considered as promising chemotherapeutic agents. Several experimental studies have proved plants for traditional claims and also explored novel therapeutic actions. However there is a need to explore other hidden beneficial potential of above mentioned plants which describe in Unani System of Medicine.

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