

No Case of Cancer treated in this dispensary for the last 3 years. Record searched.

## Cancer.

Definition: It is a malignant form of new growths of epithelium. There is a primary growth, which afterwards destroys the neighbouring tissue, ulcerates giving very offensive smell if superficial. It readily spreads along the lymphatics involves neighbouring glands (lymph) or even spreads to far lying important organs such as liver, Brain, lungs etc. It may affect any epithelial surface or any organ but is mostly seen in organs exposed to injury or irritation.

### Causation

1. Injury or irritation: As in Kashmir, people wear "Kangri" (a kind of fire container earthen vessel) next to their chest and abdomen, get Cancer of abdomen by continued irritation.
2. Heredity: - not very important.
3. Geographical distribution: It is generally seen in low lying marshy places liable to periodical floods.
4. Age: - Very rare before 30, more common between 40 + 54.
5. Sex. Women more liable than men.

Females: - In them it usually attacks breasts, uterus and other sexual organs 80% <sup>all</sup> of cases among females.

Males: - attacks usually stomach, intestines etc.

Cancer is not an infectious disease :- As in other infectious disease the micro-organisms travel through the blood and attack other organs, it is not the case with Cancer. The Cancer cells actually themselves circulate in the blood and cause secondary nodules in other organs of the body. There are no germs in it but there are dead white blood cells. Proved by the example that the tumour can be transplanted into the other animal by injecting the tumour cells, then these cells grow into the new host and form tumours of the same kind & nature as in the previous host because the tumour cells injected do grow themselves. But it is not the case in other infective diseases as in tubercle if we inject the tubercle cells into an other animal, the cells die away in a short period but the micro-organisms grow and form another tubercle in the new host, quite separate in structure from <sup>that in</sup> the previous host. This shows that there are no micro-organisms which produce Cancer.

Varieties of Cancer :- 3 kinds.

I. Epithelioma Cancer.

II. Columnar do.

III. Spheroidal celled do.

I. Epithelioma :- It grows from skin or other parts of the body covered with squamous cell epithelium. It is nothing but the unlimited multiplication of epithelium cells. Generally grows in mouth, tongue, urinary & generative organs.

It infects the lymphatic glands very early, forms ulcers in them

II. Columnar celled Cancer: - Mostly seen in Alimentary Canal, Stomach, intestine i.e. in those parts where columnar celled epithelium is abundant.

III. Spheroidal celled Cancer. attacks mostly glands as nearly all the glands are lined with spheroidal cells. mostly the breast, & afterwards prostate, pancreas, liver etc.

Symptoms: Parts attacked by Cancer in the body  
arranged according to frequency

1. Breasts. 2. uterus 3. ovaries. 4. liver.
5. Bone. 6. Stomach. 7. Intestine and Rectum.
8. Mouth 9. gums. 10. gall bladder, 11. Pancreas.
12. bile ducts, 13. Brain, 14. Bladder. 15. appendix
16. anus. 17. larynx, lip & nasal fossae. 18. lymphatic glands.
19. urinary tract, 20. Tongue, 21. Testis. 22. Penis
23. Spleen. etc etc. Real speaking it can effect each and every part of the body.

Symptoms: - General to every part of the body: -

1. Rapid emaciation.
2. Death occurs very soon between 6 months & a year.
3. Anaemia and Cachexia, loss of flesh.

Signs: - Tumour present in the organ, rapid growth, painful hard etc.

Immunity: It seems that there are some people who are naturally immune, as it is seen in animals that some animals do not develop Cancer although the Cancer cells may be transplanted in them.

Immunity can also be acquired to some extent. As it is seen in animals that if one animal is injected <sup>with</sup> less virulent Cancer cells, then after a short period, he can stand much better to highly virulent Cancer cells than the other animals.

Treatment: (A) Operative (B) Radium.

(A) Operative treatment is successful in Cancers of Breast, uterus, alimentary canal. But the operation should be much extensive so that the tumour along with larger parts of the healthy tissues along with the infected lymphatics and lymphatic glands are removed. It usually recurs after operation because of few cells of the Cancer are left behind, these again grow and form the similar tumour again.

(B) Radium: It is a better treatment, mostly used now a days but is more effective in Cancer of mouth & skin, tongue, larynx, urethrae etc. It is also used to destroy the remaining Cancer cells after operation when it is applied in the operative cavity because it destroys the

the Cancer cells and stimulates the surrounding tissues to grow very rapidly. But it can be not be used in cancers of Alimentary Canal because after destroying the Cancer cells it produces serious defects such as perforation of the intestine, severe bleeding or thrombosis. It is much better treatment than X-Rays as regards Cancer.

Radium was discovered by Madame <sup>Curie</sup> in 1898. It is sold in the form of Radium bromide. Three kinds of Rays are given off  $\alpha$ ,  $\beta$  &  $\gamma$ . But only  $\gamma$  rays are used and not the other rays. Radium Treatment is very useful in the early Commencement of the disease.

~~~~~