

Flax Seeds In Prostate Cancer A Case report- self experienced.

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Background:- High risk advanced prostate cancer are beyond the scope of radical treatments more so they are associated with significant morbidity (1). Addition of flaxseeds to diet are likely to provide relief in the management of prostate cancer as experienced by Author.

Brief History:- I am confirmed case of high risk prostate cancer diagnosed on 12.3.12 Biopsy Lal path no.12-7544646 prostate core Biopsy adenocarcinoma (Acinor,NOS) Gleason score- 4+4=8, tumor invades 70% of core volume, perineural invasion seen. USG abdomen: prostate 42g heterogenous with breach in right lobe, Pelvis and abdominal node- enlarged largest 3cm. All Routine investigation within normal range, PSA-246, Bone scan a few mets (right pelvic bone and two ribs). Personal data thin, tall(5'9"), Weight 52kg. , BP122/80, vegetarian no addiction.

Treatment:- On 14.3.12 bilateral orchidectomy Followed by Bicalutamide and honovan.

Response:-

PSA=- subsequent readings(2012)- April<4, June-2.1, September-34,-december 57(rising trend).

Left supraclavicular nodes also started enlarging as I noticed in September 2012.

On December 15,2012- I stopped all treatment as PSA was rising. Rising PSA was an Indication that therapy is not working. I searched for alternative therapy and found that flaxseeds supplementation reduces prostate cancer proliferation.(2)

From 15december 2012 after all I resored to flaxseeds therapy (i.e. 30g Powdered flaxseeds taken with curd per day Or sprinkled over cooked vegetables). There was dramatic response that by february 2013PSA was below one. Scince then it is below one i.e. on 11.3.17 PSA <0.07.

DIET:-

I changed my diet , No animal or processed food no beverages Added fresh fruits , Lot of salad.

I. Observation

Subjective: weight loss 2kg, skin papery , thin (? Loss of subcutaneous fat), Loss of body hair, Gynecomastia , abdominal girth increased by 2.5cm , urinary stream improved feeling of wellbeing, working normally.

Objective:- Since february 2013 PSA below one(0.07) also same on 11.3.2017.

USG-prostate size reduced to 18g, abdominal and supracalvicular nodes disappeared , bone scan mets stabilized. Since then subjective and objective observational data are same.

II. Discussion

Flax seeds are richest source of plant based

Omega-3 fatty acids called Alpha- Linolemic Acid(ALA) . secondly flaxseeds are high in lignan antioxidants also commonly referred as phytoestrogen.

Omega 3 fatty acids reduce LDL and increase HDL thus clears vessels of cholesterol deposits. It is considered as healthy fat and should be include in balanced diet. After ingestion flaxseeds are metabolized and converted into enterolignans , enterolacton and enterodiol via aerobic instestinal flora(3). Entaerolactone a major metabolite of flax seeds suppresses proliferation and migration of prostrate cancer cells. The lignans of flaxseeds have properties to reduce blood supply and induce aptosis and modulate immune system(4,5).

Clinical studies by Azrad et al 2013 (6)stated that flaxseeds derived enterolactone is inversely associated with tumore cell proliferation in men with localized prostate cancer. Tinakaczor (2014) (7). extracted data from above study and find that flaxseeds can reduce aggressiveness of an already existing tumor of prostate.

Diet also plays role m management of prostate cancer low fat diet i.e. 20% less fat diet reduce tumor proliferation (8), Low fat reduces weight and weight loss may reduce prostate aggressiveness thus taken together i.e. flaxseeds and low fat diet in combination might often benefits to some men with cancer prostate. Two vitrostudies also support that enterolactone merabolite of flaxseeds reduce prostate cancer development and proliferation(9,10).

III. Conclusion

Flaxseeds is safe, less expensive easy to obtain, does not interfere with existing treatment. It can be used in routine diet no contra-indication, no adverse reaction. The present findings are encouraging and may play a role in Indian scenario as many Indian patients are poor and radical treatments are costly. Author has no hesitation in recommending this to all patients of prostate cancer at all stages. Further large studies are needed to decide, clinical decision making.

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