American Institute of Integrative Oncology
RESEARCH & EDUCATION

CASE STUDY SUBMISSION

Important: In observance of HIPAA and the sacred trust between care giver and patient, absolutely no patient names or identifying information is to be disclosed. Patient privacy is to be preserved. If you attach any medical records, pathology, surgical or laboratory reports, all names are to be removed.

Date	9/26/17
Clinician Name & Credentials	Sarah Shahab
Email	

Describe Your Patient (Please SUMMARIZE and use economy of words. You will have 15 minutes to present)

Age, Gender & Ethnicity	52 F
Body Type	
Values *What is most important to this patient? (Quality of Life, Decision Making, Side Effects?)*	Being able to see children go to college, marry and have kids. Ability to help others with similar issues
Stress Resilience	excellent
Other	
Primary Diagnosis & Date *(ex. Breast Cancer L, T3 N1 M0, BRCA1 positive, grade 3, Ki67 > 45%)*	Multiple Myeloma 2009, incidental finding, no end organ damage.
Secondary Diagnosis *(ex. Diabetes Type 2, Obesity)*	none

Patient Status

☐ New Diagnosis ☐ Recurrence ☐ In Treatment ☑ In Recovery ☐ In Remission ☐ At Risk

Concomitant and/or Complicating Factors *(ex: poorly controlled diabetes, insomnia, poor support system)*	none
Adverse Effects of Cancer or Cancer Treatments *(ex. anxiety-depression, diarrhea, peripheral neuropathy)*	some peripheral neuropathy, now much better
Relevant Laboratory, Pathology & Medical Reports *(attach a PDF with patient identifying information removed or summarize)*	Latest Relevant Labs IgG 2350, Protein SPEP 7.9, Monoclonal band 15%, Monoclonal band absolute 1.2, Kapp/lambda ratio 2.5, Beta2 Microglobulin 1.5, Albumin 4.1, Globulin 3.7

Brief Summary of Recent History

Multiple Myeloma diagnosed 2009(Bone marrow Biospy showed a 85 % malignant plasma cell infiltrate), received 9 months of Revlimid and Velcaid (BM bx malignant plasma cell infiltrate 10%), the Allogenic BM transplant -July 2010- 3 months post transplant BM bx 5% malignant infiltrate. They wanted to repeat BM transplant- I declined. Revlimid started again at 25 mg/day decreased quickly to 10mg/day then over the course of 2 years down to 5 mg/day due to side effects of fatigue and neuropathy. On my own stopped revlimid completely in April of 2014 due to these side effects.
Since then, have been on a clean, mostly vegetable based diet(Low Carbs) but recently 1 month ago trying very low carbs- ketogenic diet. My numbers have stayed steady more or less over these years. peripheral neuropathy is much better.

Brief Summary of Additional Relevant Health, Medical, Psycho-Social and/or Family History

Very supportive family and friends.

Other Relevant Information

Such as Chinese or Ayurvedic diagnosis, Naturopathic/Homeopathic Information, etc. *(ex. Liver Qi Stagnation, Dysbiosis)*

no

Brief Summary of Relevant Past Oncology or Medical Treatments

(ex. surgery, radiotherapy, chemotherapy, immunotherapy, hormone therapy, drug therapy)

Bone marrow biopsy as stated above

Summary of Recent and Current Treatments

Medical Oncology Care *(surgery, radiotherapy, chemotherapy, immunotherapy, hormone therapy, drug therapy)*

none

Integrative Oncology Care *(nutraceutical, botanical, phytochemical, acupuncture, energy medicine, other)*

Curcumin 7 gms/day, quercitin 2 gms/day, vitamin D 10,000IU/day, fish oil 2 gms/day, Magnesium 400 mg and Melatonin at bedtime. For adrenall fatigue- Dhea 50 mg and pregnelonone 100 mg in the morning. CoQ 10 400 mg/day, Chromium 600 mg/day

Your 2 Core Questions (stated clearly and succinctly)

1. Any supplements to help BM recover? is progesterone, estrogen supplements harmful , as my levels are low and my naturopath physician recommended I start some.
2. Is plant based ketogenic diet okay or is meat essential?

Attached Medical Records for Reference (with patient identifying information removed)

Case Study from S Shahab 09.30.17
Multiple Myeloma

Studies show that early intervention is preferable to waiting and watching a smoldering MM
Revlimid + Dexamethasone
and/or Velcade(no green tea with Velcade)

Manage Inflammation
Bone Health
Hypercoagulation
NFkB and AKT pathways

Active agens
Sulphoraphanes Broccoprotect 2/2x/day
Low Dose DHEA 5-25 mg q am
Licorice Root extract 2 teaspoons daily (Gan Cao)
Ursolic Acid (Oldenlandia/Heydotis, Sage, Rosemary)
ursolic acid, found in basil, apples, prunes, and cranberries, for its ability to suppress STAT3 activation.
Pure Honokiol (magnolia bark) 3 caps x day
Vitamin D 75
Berberine 500mg tid
Ganoderma
Isatis Ban Lan Gen
Curcumin

Hypercoagulation
Omega 3 FA
Curcumin
Salvia Milthiorrhiza Dan Shen 2 teaspoons dailiy
Proteolytic enzymes (Wobenzyme or similar)

Clinical Synergy Modified Citrus Pectin 1 5g scoop 3x.day

Protect bones
Osteoben 2/2x/day
Restore Right+Psoralea+Epimedium+White Peony

Adaptogen
Natura Health Products POWER ADAPT 1 teaspoon twice daily

Custom Tonic (TBD) 1 teaspoon 2x/day
Magnolia

Rabdosia
Licorice Root
Green Tea (if not on Velcade)
Astragalus
Ganoderma
Chaga
Cordyceps
Scutellaria baicalensis
Ashwaganda
Milk Thistle
Ginger
Schisandra
Lycium
Tang Kuei
Gotu Kola
Licorice Root
Dan Shen Salvia milt.

SCHEMA OF PATHOPHYSIOLOGY

Plasma cells	* usually in the:bone marrow (myeloma) but can also be extra-medullary
Skeletal Finding: associated effects of bone destruction	* solitary or multiple osteolytic lesions * diffuse osteoporosis * elevated serum calcium * hypercalciuria * loss of height
extra skeletal myeloma (i.e.. outside bone)	* most commonly in head/neck area, e.g. nasopharynx., Also found in liver, kidneys and other soft tissues
peripheral blood	* anemia, abnormal clotting * leukopenia, thrombocytopenia * plasma cell leukemia * circulating monoclonal B lymphocytes
	* hyperproteinemia 80-150 gr/1

	* hypervolemia
	* monoclonal immunoglobulins (IgG, IgD, IgA,
plasma	IgM, IgD, light chains)
protein	* amyloidosis
changes	* narrowed anion gap
	* elevated serum B-2-microblogulin
	* decreased serum albumin
	* elevated serum Il-6 and C.R.P. (C - reactive protein)
	* proteinuria, casts, without leucocytes or
kidney	erythrocytes
abnormalities	* tubular dysfunction with acidosis and uremia

Of myeloma patients, 93% have multiple bone lesions and 3% have only one lesion. The remaining 4% who have only extra-skeletal lesions represent a sub-group with distinct disease and treatment characteristics; this sub-group will not be dealt within the context of this booklet.

Types of Monoclonal Proteins (M-components)	Percentages/Totals
Serum types:	
IgG	52
	21
IgA	
	75%
IgD	2
IgE	<0.01
Urine (Bence Jones only) types K (Kappa) L (lambda)	11%
H chains (G or A) only	<1
	<1
2 or more monoclonal paraproteins	

	2%
no monoclonal paraprotein	1
*IgM	12%

*IgM (rarely myeloma) typically associated with Waldenstroms macroglobulinemia rather than myeloma.

Source: Data on 1,827 myeloma patients, collected and analyzed by Pruzanski and Ogryzlo, 1970.

The plasma volume rises due to the elevated total serum protein content. It can cause pseudo hyponatraemia (low serum sodium) and narrowed anion gap. High concentrations of myeloma protein can give a clinical "hyperviscosity syndrome."