

*** Type 2 Diabetes - Case Study 01 (Prior History)**

November 17, 2011

Male: 60 years, Height: 5 ft. 6 inches, Weight = 75.454 Kg (166.0 lbs.), Fat = 23.2% (0)

Anti-Diabetic Rx = Eurepa MF2 (Repaglinide XL 50mg) + Metformin 500 mg + Insulin Breakfast = 40 units + Dinner = 20 units = 60 units/day

SERUM TESTS	26/11/2010	27/12/2010	13/1/2011	31/01/2011	1/3/2011	2/4/2011	23/08/2011	26/09/2011
FBS mg/dL (Urine)	102 (Trace)	119		151	161		177	
PPBS mg/dL (Urine)	268	178		197	217 (++)	275 (++++)	278 (++++)	
HbA1C %			8.72				8.8	8.9
Insulin - Fast uIU/mL								
Insulin - PP uIU/mL								
Hb g/dL		12.2	11.6	11.9	12.7	13	11	11.8
Ferritin ng/mL								
BUN mg/dL		12		7	6			9.8
Creatinine mg/dL		1.02	0.98	1.02	0.93			0.97
Uric Acid mg/dL		6	5.56	5.83	5.43			6.2

Anit-Hypertensive Rx = Tazloc H (Telmisartan 40 mg + HCTZ 12.5 mg) + Selomax XL (Metoprolol XL 50 mg + Amlodipine 5 mg)

	24/09/2011
BP	150/80
P bpm	84
BPs	
Ps bpm	

Notes:

* All these readings are before starting the program at SpaceAge Anti-Aging Center in November 2011

General observations are that the blood sugar levels are not under control inspite of numerous anti-diabetic medications and insulin, the hemoglobin has decreased to around 11.5 g/dL due to prolonged use of aspirin resulting in poor energy levels and the uric acid levels have significantly increased to 6.0 mg/dL showing gradually deteriorating kidney function due to uncontrolled diabetes. Sugar is present in the urine at (++++) level.

Reversing Type 2 Diabetes - Case Study 01

November 26, 2012

Male: 60 years, Height: 5 ft. 6 inches, Weight = 75.454 Kg (166.0 lbs.), Fat = 23.2% (0)

Anti-Diabetic Rx = Eurepa MF2 (Repaglinide 2 mg + Metformin 500 mg) + Humalog Mix BkF = 32 units + D = 20 units = 52 units/day

Januvia (Sitagliptin Phosphate) 100 mg + Diamicron XR (Gliclazide) 60 mg + Novonorm (Repaglinide 2 mg)

Interim Goal While on Program, FBS = 140 mg/dL, PPBS = 180 mg/dL. This is to ensure patient does not go Hypoglycemic

SERUM TESTS	* 2/4/11	* 23/08/11	* 23/11/11	24/12/11	20/03/12	21/6/12	18/08/12	12/11/12
FBS mg/dL		177	205 (Trace)	132	137	181	152	238
PPBS mg/dL (Urine)	275 (++++)	278 (++++)	202 (Trace)	217	136	176	112	138
HbA1C %		8.8	8.7	9		8.5	8.3	8.4
Insulin - Fast uIU/mL	Humalog	Humalog	52.8	Humalog reduced				Humalog reduced
Insulin - PP uIU/mL	40 + 20 = 60 units	40 + 20 = 60 units	88.4	32 + 20 = 52 units				26 + 20 = 46 u/day
Hb g/dL		11	11.2	10.3	12.6	12.9	12.7	13.1
Ferritin ng/mL			21.4				64.2	89.4
BUN mg/dL			8.4				8.00	9.00
Creatinine mg/dL			1.00	1.03	1.02	1.00	1.09	1.04
Uric Acid mg/dL			6		5.87		6.5	5.7
Cystatin C mg/L			0.84					(Numerous Crystals in both Kidneys)

Anit-Hypertensive Rx = Tazloc Trio (Telmisartan 40 mg + Amlodipine 5 mg + HCTZ 12.5 mg) + Seloken XL (Metoprolol XL 50 mg)

Interim Goal While on Program, BP = 140 / 90, P = 85 bpm. This is to ensure patient does not suffer Hypotension or Bradycardia

	* 24/09/11	* 17/11/11	23/01/12	12/3/2012	24/04/12	14/07/12	15/10/12
BP mm Hg	150/80	133/75	138/77	136/79	136/75	134/73	123/78
P bpm	84	86	77	79	79	86	82
BPs mm Hg standing		149/74	131/76	149/82	143/77	130/76	129/76
Ps bpm		90	79	82	76	89	83
CRP mg/L		2.96	2.29				(LVEF = 60%)
Mg mg/dL		1.67					

Notes:

* These readings are before starting the program at SpaceAge Anti-Aging Center in Nov 2011

General observations are that the blood sugar levels are under better control with anti-diabetic medication and insulin, the hemoglobin has increased to around 12.7 g/dL resulting in improved energy levels and better physical stamina; there is a significant improvement in Ferritin levels showing a fair reserve of iron at intracellular levels; and there is no further increase in uric acid levels showing no further deterioration of kidney function; and there is a much better control of diabetes. Sugar is no longer present in the urine. Insulin levels have been steadily brought down without any deterioration of HbA1C.

Reversing Type 2 Diabetes - Case Study 01 - Part 2

March 12, 2013

Male: 60 years, Height: 5 ft. 6 inches, Weight = 75.454 Kg (166.0 lbs.), Fat = 23.2% (0)

Anti-Diabetic Rx = Eurepa 2 (Repaglinide 2 mg) + Humalog Mix = 26 units at Breakfast + 10 units at Dinner = 36 units/day
 Januvia (Sitagliptin Phosphate) 100 mg + Diamicron XR (Gliclazide) 60 mg

Interim Goal While on Program, FBS = 140 mg/dL, PPBS = 180 mg/dL. This is to ensure patient does not go Hypoglycemic

SERUM TESTS	* 23/08/11	* 23/11/11	24/12/11	20/03/12	21/6/12	18/08/12	12/11/12	4/2/2013
FBS mg/dL	177	205 (Trace)	132	137	181	152	238	151
PPBS mg/dL (Urine)	278 (++++)	202 (Trace)	217	136	176	112	138	120
HbA1C %	8.8	8.7	9		8.5	8.3	8.4	8.2
Insulin - Fast uIU/mL	Humalog	52.8	Humalog reduced				Humalog reduced	Humalog reduced
Insulin - PP uIU/mL	40 + 20 = 60 units	88.4	32 + 20 = 52 units				26 + 20 = 46 u/day	26 + 10 = 36 u/day
Hb g/dL	11	11.2	10.3	12.6	12.9	12.7	13.1	13.1
Ferritin ng/mL		21.4				64.2	89.4	
BUN mg/dL		8.4				8.00	9.00	7.00
Creatinine mg/dL		1.00	1.03	1.02	1.00	1.09	1.04	1.19
Uric Acid mg/dL		6		5.87		6.5	5.7	3.6
Cystatin C mg/L		0.84						

(Numerous Crystals in both Kidneys)

Anit-Hypertensive Rx = Tazloc (Telmisartan 40 mg) + Seloken XL (Metoprolol XL 50 mg)

Interim Goal While on Program, BP = 140 / 90, P = 85 bpm. This is to ensure patient does not suffer Hypotension or Bradycardia

	* 24/09/11	* 17/11/11	23/01/12	12/3/2012	24/04/12	14/07/12	15/10/12
BP mm Hg	150/80	133/75	138/77	136/79	136/75	134/73	123/78
P bpm	84	86	77	79	79	86	82
BPs mm Hg standing		149/74	131/76	149/82	143/77	130/76	129/76
Ps bpm		90	79	82	76	89	83
CRP mg/L		2.96	2.29				
Mg mg/dL		1.67					

(LVEF = 60%)

Notes:

* These readings are before starting the program at SpaceAge Anti-Aging Center in Nov 2011

General observations are that blood sugar levels are under better control with anti-diabetic medication & insulin. Hb has increased to 13.1 g/dL resulting in improved energy levels and better physical stamina; there is a significant improvement in Ferritin = 89.4 ng/mL showing a fair reserve of iron at intracellular levels; and there is a significant drop in uric acid levels from a high of 6.5 mg/dL to 3.60 mg/dL showing an improvement of kidney function; and there is a much better control of diabetes. Sugar is no longer present in the urine. Insulin levels have been steadily brought down to 26 + 10 = 36 units/day without any deterioration of HbA1C.