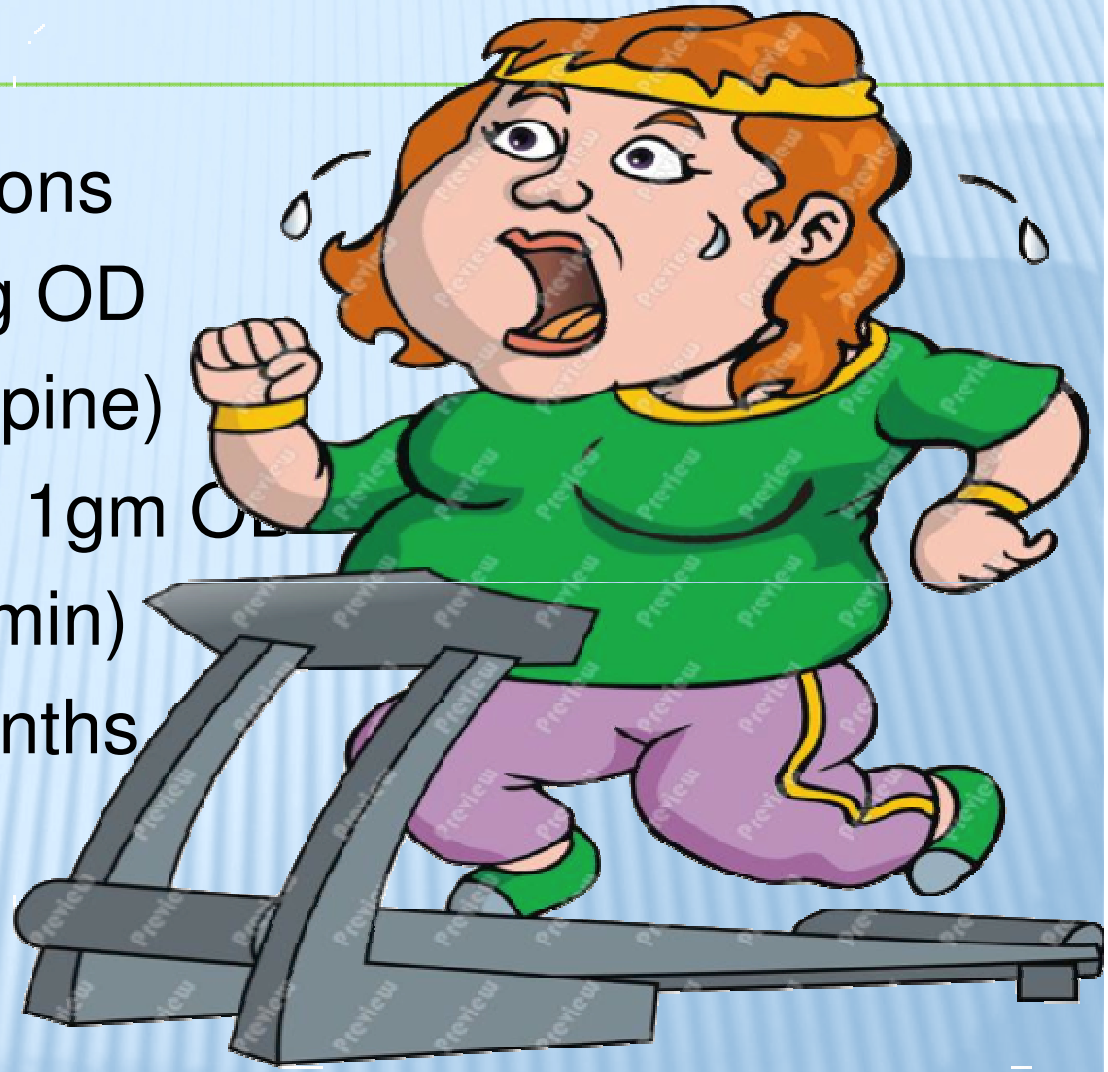
A CASE REPORT ON SUSPECTED CALCIUM CHANNEL BLOCKER INDUCED HYPOTHYROIDISM

D D
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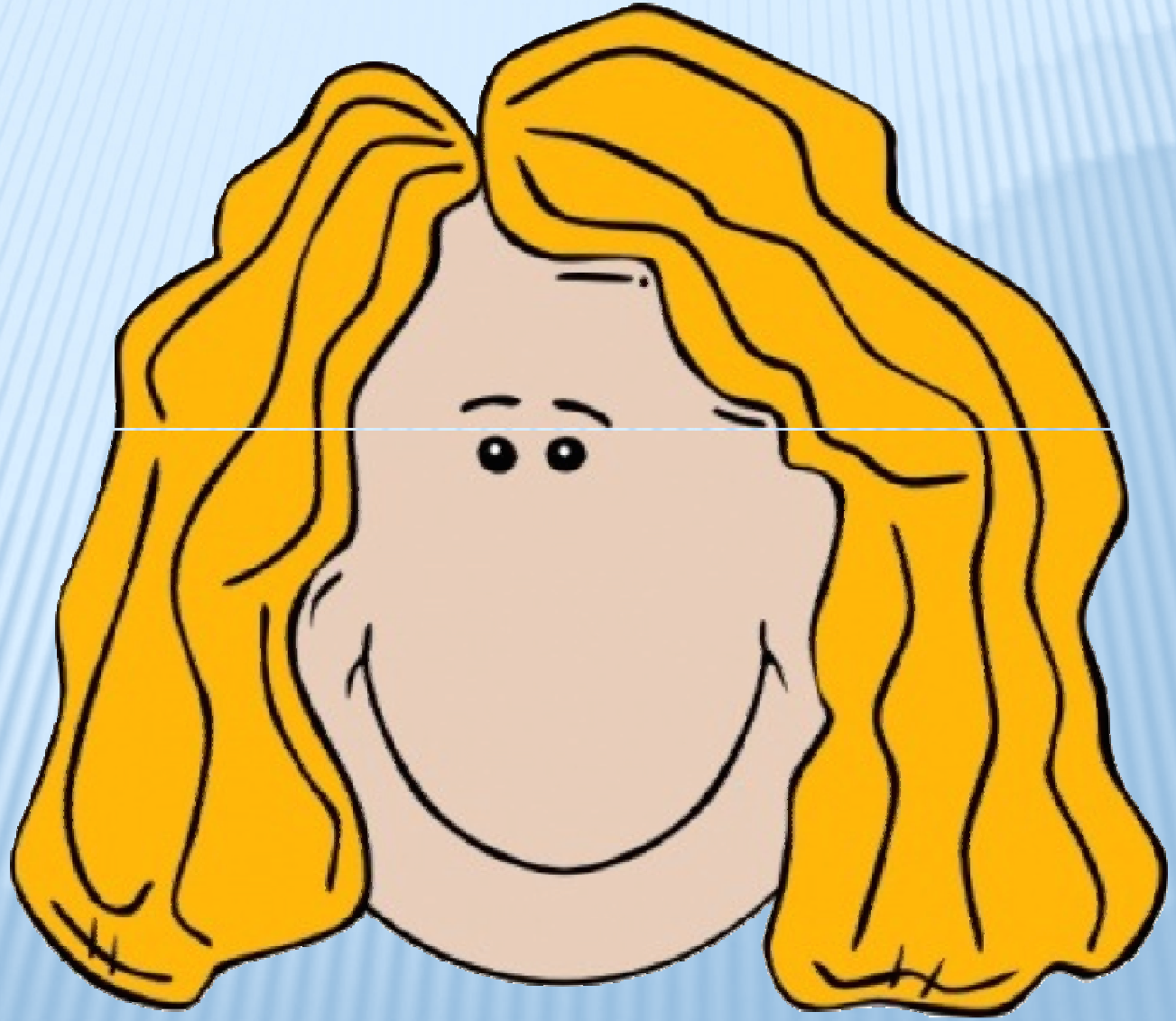
- A 52 year old female presented to Medical OP for routine checkup.
- Obese with BMI 35mmHg
- BP 150/90 Kg/Cm^2
- Investigated further
  - FBS=130mg/dl
  - PLBS=190 mg/dl
  - Hb1Ac =11
  - Blood urea & serum creatinine
  - Lipid profile

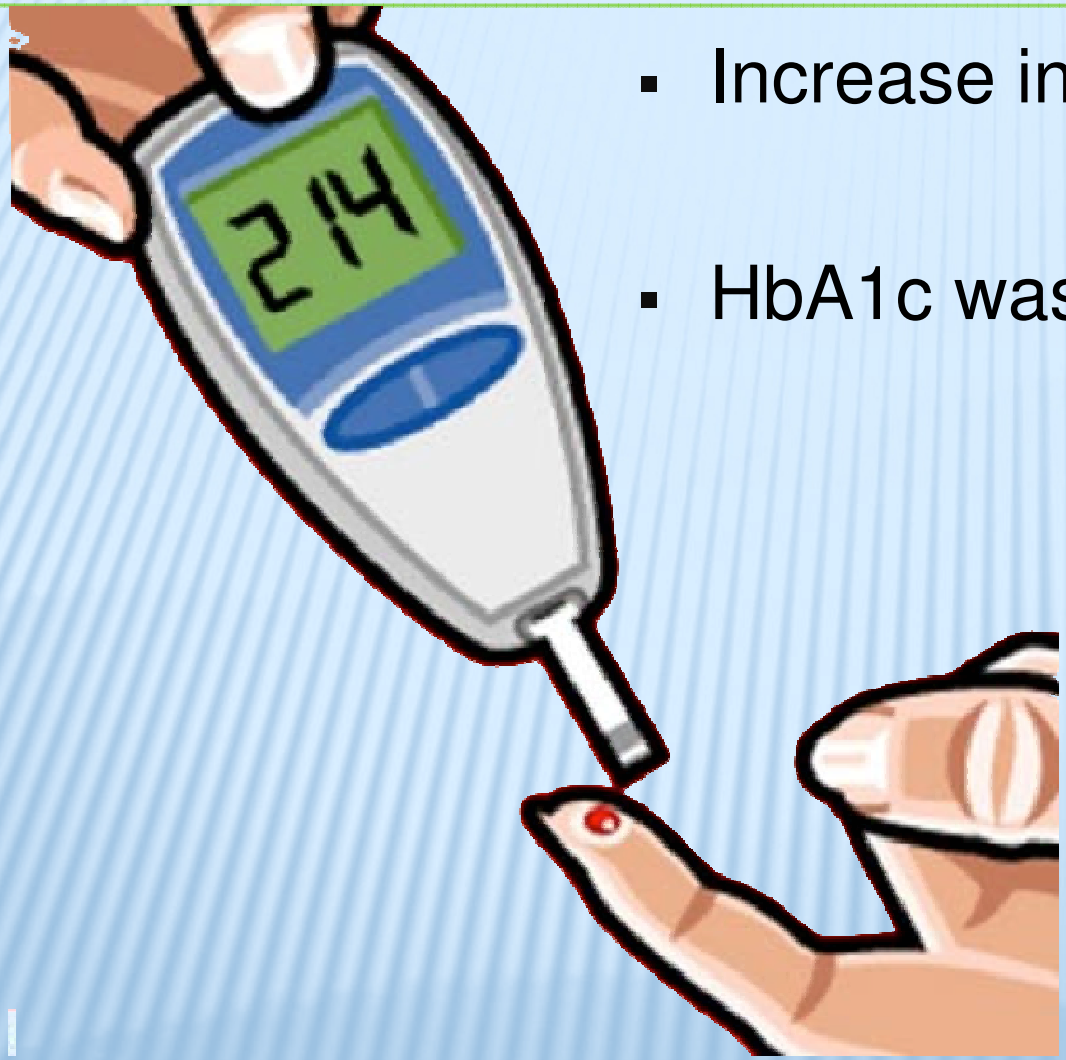
Advised

- Life style modifications
- Tab Amlopres 5 mg OD
  (Amlodipine)
- Tab Gluconorm SR 1gm OD
  (Metformin)
- Review every 3 months



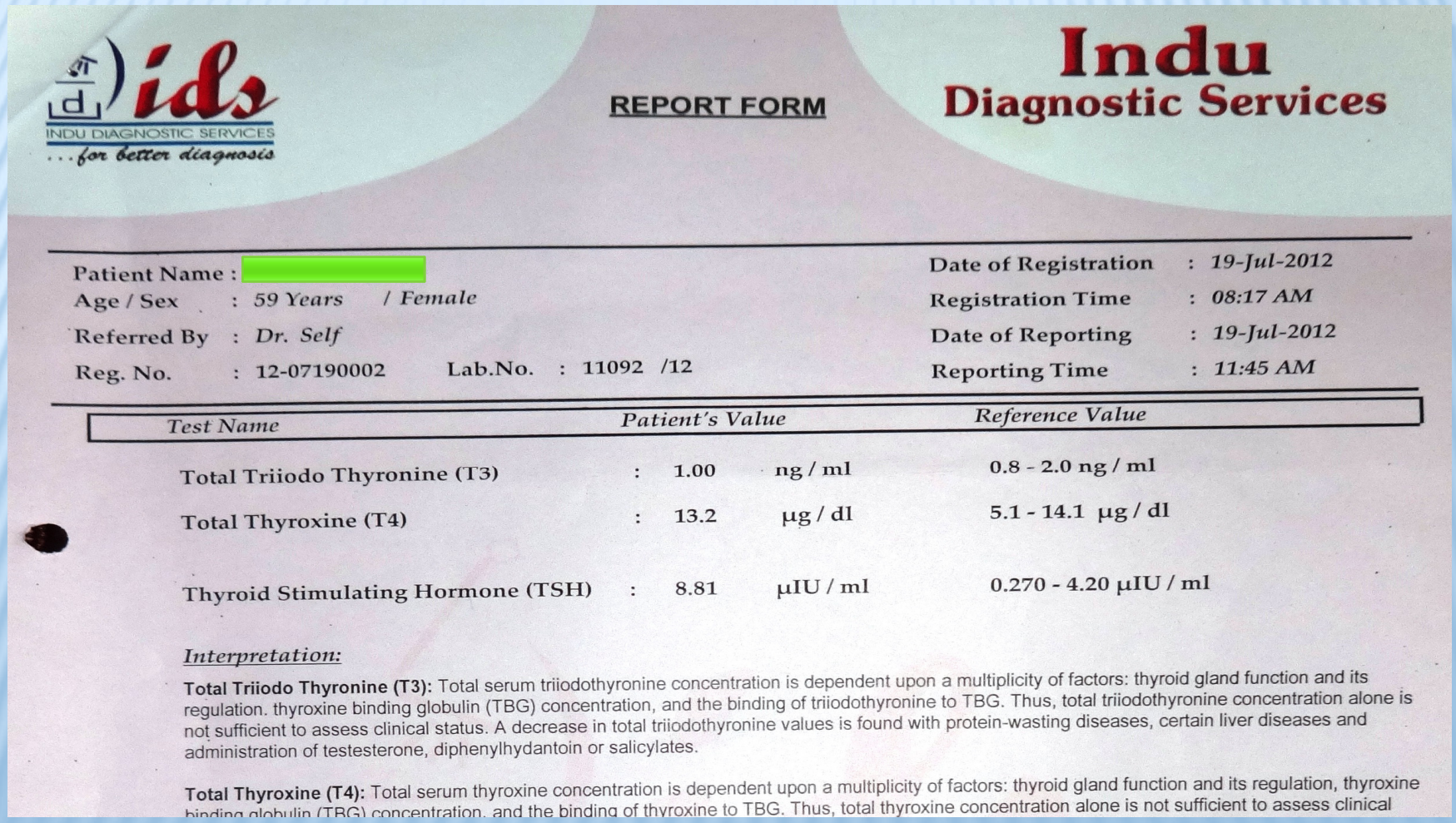
Patient happy for 4 years





- Increase in FBS and PLBS.
- HbA1c was increased.

- Suspected hyperthyroidism



ids
INDU DIAGNOSTIC SERVICES
...for better diagnosis

REPORT FORM

Indu
Diagnostic Services

Patient Name : [redacted]
Age / Sex : 59 Years / Female
Referred By : Dr. Self
Reg. No. : 12-07190002 Lab.No. : 11092 /12

Date of Registration : 19-Jul-2012
Registration Time : 08:17 AM
Date of Reporting : 19-Jul-2012
Reporting Time : 11:45 AM

Test Name	Patient's Value		Reference Value
Total Triiodo Thyronine (T3)	: 1.00	ng / ml	0.8 - 2.0 ng / ml
Total Thyroxine (T4)	: 13.2	µg / dl	5.1 - 14.1 µg / dl
Thyroid Stimulating Hormone (TSH)	: 8.81	µIU / ml	0.270 - 4.20 µIU / ml

Interpretation:

Total Triiodo Thyronine (T3): Total serum triiodothyronine concentration is dependent upon a multiplicity of factors: thyroid gland function and its regulation. thyroxine binding globulin (TBG) concentration, and the binding of triiodothyronine to TBG. Thus, total triiodothyronine concentration alone is not sufficient to assess clinical status. A decrease in total triiodothyronine values is found with protein-wasting diseases, certain liver diseases and administration of testesterone, diphenylhydantoin or salicylates.

Total Thyroxine (T4): Total serum thyroxine concentration is dependent upon a multiplicity of factors: thyroid gland function and its regulation, thyroxine binding globulin (TBG) concentration, and the binding of thyroxine to TBG. Thus, total thyroxine concentration alone is not sufficient to assess clinical



- Diseases or drugs with plausible explanation to the condition
  - Iodine deficiency
  - Family History
  - Diabetes mellitus
  - Metformin
  - Amlodipine

- Anti Hypertensive treatment changed to ACEI

  Tab Enam D(Enalapril+Hydrochlorthiazide)OD

  Tab Eltroxin(Levothyroxine Na) 50µg OD

- Observed for 1 year

- Tab Eltroxin 25 µg for 6 months

- Sugar levels and BP in control.
- Gradually Tab Eltroxin withdrawn.
- Reviewed every 3 months for 1 year and every 6 months there on.

WHO-UMC CAUSALITY ASSESSMENT SCALE

CERTAIN	***Event or laboratory test abnormality,with plausible time relationship to drug intake*** ***Cannot be explained by disease or other drugs*** ***Response to withdrawal plausible(pharmacologically,pathologically)*** ***Event definitive pharmacologically or phenomenologically (i.e.an objective & specific medical disorder or a recognised pharmacological phenomenon)*** ***Rechallenge satisfactory, if necessary***
PROBABLE/LIKELY	***Event or laboratory test abnormality,with reasonable time relationship to drug intake*** ***Unlikely to be attributed to disease or other drugs*** ***Response to withdrawal clinically reasonable*** ***Rechallenge not required***
POSSIBLE	***Event or laboratory test abnormality,with reasonable time relationship to drug intake*** ***Could also be explained by disease or other drugs*** ***Information on drug withdrawal maybe lacking or unclear***
UNLIKELY	***Event or laboratory test abnormality,with a time to drug intake that makes a relationship improbable (but not impossible)*** ***Disease or other drugs provide plausible explanations***

CONDITIONAL/ UNCLASSIFIED	***Event or laboratory test abnormality*** ***More data for proper assessment needed,or*** ***Additional data under examination***
UNASSESSABLE/ UNCLASSIFIABLE	***Report suggesting an adverse reaction*** ***Cannot be judged because information is insufficient or contradictory*** ***Data cannot be supplemented or verified***

- Literature Review

1 Suppression of aldosterone synthesis and secretion by ca(2+) channel antagonists.

2 Pituitary calcium uptake and release of ACTH, GH and TSH :effect of verapamil.

3 Effect of calcium channel blockers on the serum levels of thyroid hormone.

A clinical Study in Osmania General Hospital with 60 patients is on go.



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thank you