

R E S U L T S

In our study twenty patients, presented by lone atrial fibrillation (with no apparent clinical cause) were examined.

Ten of the patients were males and the other ten were females with mean age = 55.6 years.

The following results were found:

1. History:

- There was no history of rehumatic diseases, ischaemic heart disease or hypertension.

2. Clinical examination:

All the patients were presented by lone atrial fibrillation where no apparent clinical cause could be detected.

Results of clinical examination are summarised in Table (1).

- Patients No.3 and No. 15 showed a slight diffuse enlargement of the thyroid gland. Thyrotoxic eye signs were absent in those patients.
- Fine hand tremors were detected in five patients (No.3, No.7, No.15, No., 17 and No.19) and their

palms were moist and warm. They were normotensive and no systolic murmur is heard over the thyroid gland.

- Examination of the heart showed no abnormality.
- Examination of the chest showed also no abnormality.
- All patients were normotensive.

3. Laboratory investigations:

Results of laboratory investigations are tabulated in Table (2).

By estimation of total serum thyroxine (T_4) and total serum triiodothyronine (T_3) measured by radio-immunoassay kits, we found that five patients (No.3, No.7, No.15, No.17, and No. 19) had elevated total serum T_4 RIA and total serum T_3 RIA above the high normal range. The other fifteen patients had normal values of total serum T_4 RIA and T_3 RIA.

- Figure (1) shows the relationship between mean plasma thyroxine level and sex of patients. Mean plasma thyroxine level is higher in females than in males.
- Figure (2) shows the relationship between mean plasma triiodothyronine level and sex of patients. Mean plasma triiodothyronine is also higher in females than in males.

In this present study 25% of all the twenty patients, presented by bone atrial fibrillation, were found to have hyperthyrodism .

Table 1: Clinical examination

Patient No.	Age	Sex	Wt. kgm	Systolic B.P.	Diastolic B.P.	Thyroid gland	Heart exam.	Chest exam.	Other findings
1	55	M	84	130	85	-	-	-	-
2	51	M	62	140	90	-	-	-	-
3	60	F	49	130	70	Slight diffuse enlargement	0	-	-
4	55	F	66	140	80	-	-	-	-
5	53	F	72	140	85	-	-	-	-
6	62	M	50	110	70	-	-	-	-
7	53	M	73	120	70	-	-	-	-
8	63	F	48	150	90	-	-	-	-
9	52	M	67	140	80	-	-	-	-
10	54	F	84	130	85	-	-	-	-
11	61	M	70	135	85	-	-	-	-
12	55	M	68	140	90	-	-	-	-
13	53	F	82	145	90	-	-	-	-
14	52	F	81	130	90	-	-	-	-
15	59	F	58	110	70	Slight diffuse enlargement	-	-	-
16	52	M	72	140	90	-	-	-	-
17	62	M	69	135	80	-	-	-	-
18	52.5	F	74	140	85	-	-	-	-
19	55	F	77	140	90	-	-	-	-
20	53	M	69	140	85	-	-	-	-
Mean	55.65		68.75	134.25	83				
S.D.	5.95		10.93	10.54	7.50				

F = Female, M = male.

Table 2: Estimation of T₄RIA and T₃RIA

Patient No.	Sex	T ₄ RIA ug/100 ml	T ₃ RIA ng/100 ml
1	M	7.0	110.0
2	M	12.0	170.0
3	F	14.0	220.0
4	F	10.0	185.0
5	F	5.5	130.0
6	M	11.0	145.0
7	M	14.5	230.0
8	F	9.5	155.0
9	M	6.5	140.0
10	F	7.5	170.0
11	M	6.5	120.0
12	M	7.0	140.0
13	F	8.5	165.0
14	F	6.5	155.0
15	F	14.5	230.0
16	M	7.0	115.0
17	M	16.0	240.0
18	F	6.5	165.0
19	F	15.0	250.0
20	M	8.0	145.0
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Mean		9.65	169
S.D.		3.47	43.21

M = Male, F = Female.

T₄RIA = Thyroxine hormone measured by radioimmunoassay.

T₃RIA = Triiodothyronine hormone measured by radioimmunoassay.

Normal values:

T₄RIA = 5.0 - 13.5 ug/100 ml.

T₃RIA = 80 - 200 ng/100 ml.

Table 3: Estimation of T_4 RIA and T_3 RIA in males

Patient No.	Age	T_4 RIA ug/100 ml	T_3 RIA ng/100 ml
1	55	7.0	110.0
2	51	12.0	170.0
3	62	11.0	145.0
6	62	14.5	230.0
9	52	6.0	140.0
11	61	6.5	120.0
12	55	7.0	140.0
16	52	7.0	115.0
17	62	16.0	240.0
20	53	8.0	145.0
Mean	55.6	9.55	155.5
S.D.	4.37	3.72	45.42
P_1	<0.005	<0.05	< 0.05
P_2	< 0.005	< 0.005	< 0.05

Normal values:

T_4 RIA = 5.0 - 13.5 ug/100 ml.

T_3 RIA = 80 - 200 ng/100 ml.

P_1 Comparison to the total number of patients.

P_2 Comparison to the female patients.

Table 4: Estimation of T_4 RIA and T_3 RIA in famels.

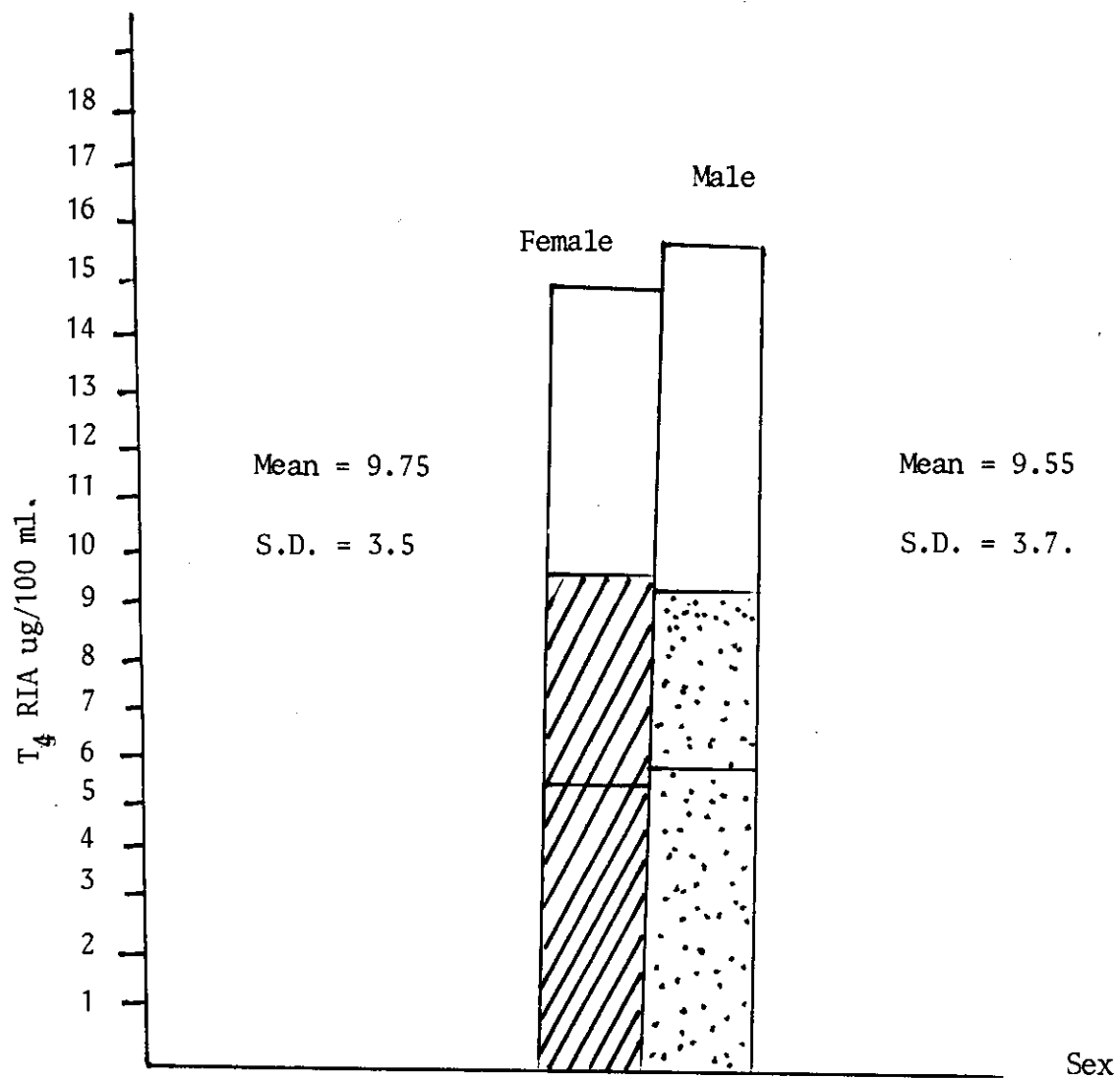
Patient No.	Age	T_4 RIA ug/100 ml	T_3 RIA ng/100 ml.
3	60	14.0	220.0
4	55	10.0	185.0
5	53	5.5	130.0
8	63	9.5	155.0
1-	54	7.5	170.0
13	53	8.5	165.0
14	52	6.5	155.0
15	59	14.5	230.0
18	53	6.5	165.0
19	55	15.0	250.0
Mean	55.7	9.75	182.5
S.D.	3.68	3.56	38.38
P_1	< 0.005	< 0.05	< 0.05
P_2	< 0.005	< 0.005	< 0.05

P_1 comparison to the total number of patients

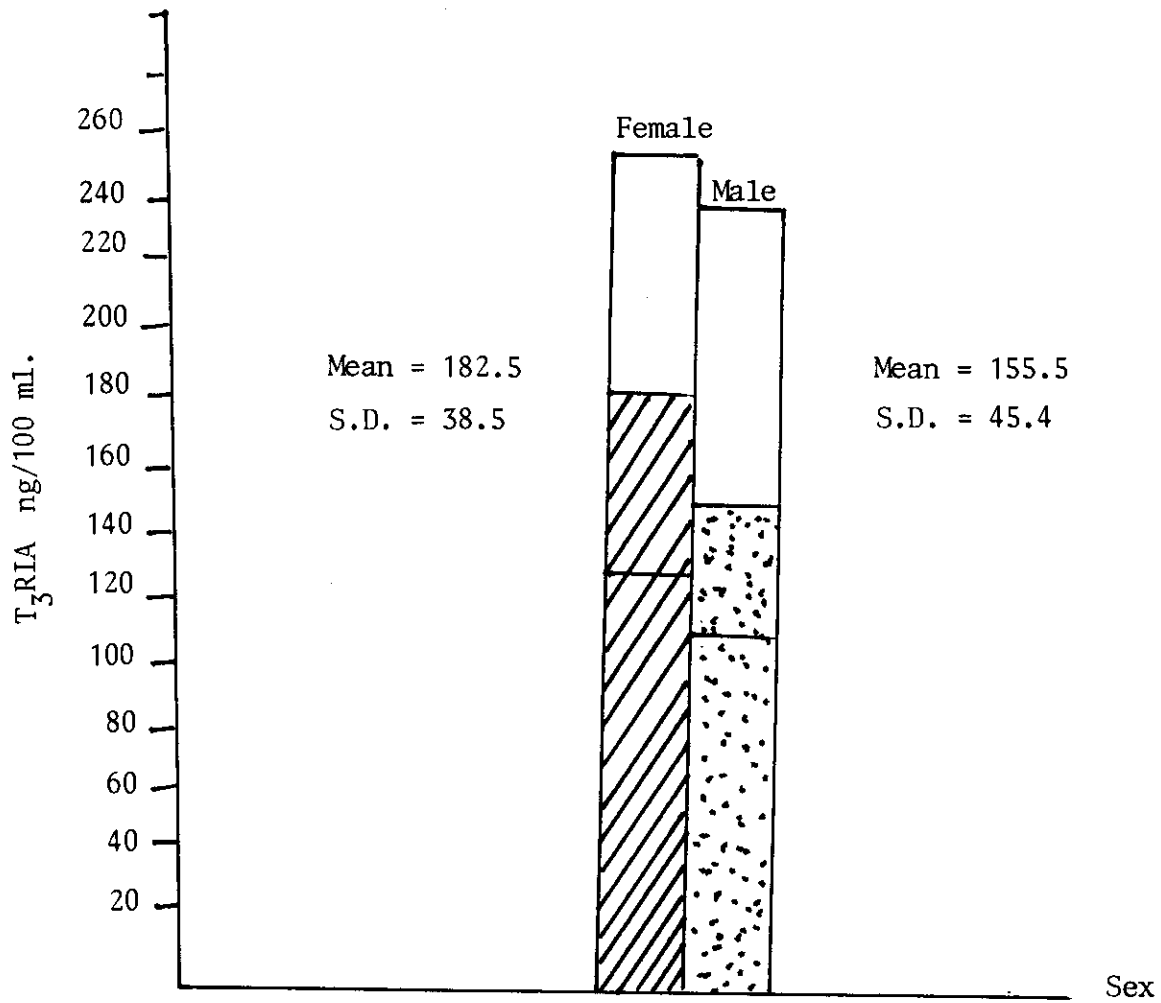
P_2 comparison to the male patients.

T_4 RIA = thyroxine hormone estimated by radio-immunoassay

T_3 RIA = Trithyronine hormone estimated by radioimmunoassay.



T₄RIA = Thyroxine hormone measured by radilimmunoassay.



T₃ RIA = Triiodothyronine hormone measured by radioimmunoassay.