

Appendix 1
Data collection sheet Date _____
Sudan University of science & technology
Characterization of diabetic patient's kidney using ultrasound

Patient data:

Name: _____ age: _____

Gender: Male () Female ()

Date of onset of disease:

< 1years () 1-5years () 5-10 years ()

10-15 years () 15-20 years ()

Associated anther disease: yes () No ()

Type of diabetes:

a-insulin dependent () b- Non-insulin dependent ()

Ultrasound findings:

Right kidney:

a- volume

Length () width () thickness ()

b- C/M ratio: cortex () medulla ()

b- echogenicity:

1. Normal () 2- Hypoechoic () 3- hyperechoic()

Left kidney:

a- volume:

Length () width () thickness ()

b- C/M ratio: cortex () medulla ()

a- echogenicity:

1. Normal () 2- Hypoechoic () 3- hyperechoic ()

Master collection sheet

NO	AGE (Years)	duration of diabetic (years)	kidney measurement (cm)						C/M THICKNESS		ECHOGENIS TY		RATIO		GENDE R	D.TYPE
			RT			LT										
			L	W	THI	L	W	THI	L	R	L	R	L	R		
1	48	1	11.5	4.6	5.2	11.6	4.8	5.4	0.8	0.7	3	3	1	1	2	2
2	45	1.4	10.2	3.7	4.3	10.5	4.6	5	0.7	0.7	3	3	1	1	2	2
3	49	1.7	10	3.6	4.1	10.3	4.1	4.7	0.7	0.8	3	3	1	1	1	2
4	54	3.8	9.8	3.3	3.8	10.3	4.1	4.5	0.6	0.6	3	3	1	1	1	2
5	47	3.5	10	4.5	4.8	10	4.7	5.1	0.6	0.5	3	3	1	1	2	2
6	52	4.1	9.6	3.3	3.7	9.8	3.4	3.9	0.4	0.3	2	2	2	2	1	1
7	52	1.1	10.7	4.3	4.8	10.5	4.2	4.9	0.6	0.7	3	3	1	1	2	2
8	52	2.1	10.5	4.7	5.1	10.5	4.5	5.1	0.7	0.7	3	3	1	1	1	2
9	50	0.5	10.2	3.9	4.3	10.6	4.7	5.3	0.8	0.7	3	3	1	1	2	2
10	46	1.6	9.8	3.7	4.2	10.3	4.3	4.8	0.7	0.8	3	3	1	1	1	2
11	49	4.5	9.8	3.4	3.8	10	4.4	4.7	0.5	0.6	3	3	2	2	1	2
12	53	4	10	3.7	4.2	10.2	3.9	4.4	0.5	0.5	3	3	2	2	2	2
13	47	2.8	11	4.8	5.4	11	4.6	5	0.8	0.8	3	3	1	1	1	2
14	52	2.3	10.4	4.7	5.3	10.6	4.8	5.2	0.5	0.8	3	3	1	1	2	2
15	48	2.5	10.1	4.7	5.2	10.5	4.7	5.2	0.8	0.7	3	3	1	1	1	2
16	46	0.7	10.3	4.8	5.2	10.6	5.1	5.6	0.7	0.8	3	3	1	1	1	2
17	52	2.2	10.7	5	5.3	11	5	5.3	0.8	0.8	3	3	1	1	1	2
18	48	10.4	8.5	3.2	3.5	8.7	3.2	3.5	0.2	0.2	2	2	2	2	1	2
19	53	3	9.6	3.4	3.8	9.8	3.5	4	0.6	0.7	3	3	1	1	2	2
20	49	2.6	10.2	4	4.3	10	3.8	4.1	0.5	0.5	3	3	1	1	2	2
21	47	1.5	11	4.7	5.3	11.2	4.8	5.4	0.8	0.8	3	3	1	1	1	2
22	54	9.6	9.6	3.8	4.2	9.8	3.9	4.3	0.3	0.3	2	2	2	2	2	2
23	51	2	10.5	4.6	4.9	10.5	4.4	4.9	0.7	0.7	3	3	1	1	1	2
24	55	3.7	10	4.3	4.8	10.3	4.6	5	0.8	0.7	3	3	1	1	2	2
25	45	4.3	9.8	3.6	4	9.8	3.7	4.2	0.4	0.4	2	2	2	2	1	2

NO	AGE (Years)	duration of diabetic (years)	kidney measurement (cm)						C/M THICKNESS		ECHOGENIS TY		RATIO		GENDE R	D. medication TYPE
			RT			LT										
			L	W	THI	L	W	THI	L	R	L	R	L	R		
26	58	1	11.5	4.6	5.2	11.6	4.8	5.4	0.8	0.7	3	3	1	1	2	2
27	49	1.6	10.2	3.7	4.3	10.5	4.6	5	0.7	0.7	3	3	1	1	2	2
28	49	1.3	10	3.6	4.1	10.3	4.1	4.7	0.7	0.8	3	3	1	1	1	2
29	54	3.7	9.8	3.3	3.8	10.3	4.1	4.5	0.6	0.6	3	3	1	1	1	2
30	47	3.4	10	4.5	4.8	10	4.7	5.1	0.6	0.7	3	3	1	1	2	2
31	52	4.1	9.6	3.3	3.7	9.8	3.4	3.9	0.4	0.3	2	2	2	2	1	1
32	55	16	7.6	3.1	3.5	7.6	3.2	3.5	0.2	0.2	2	2	2	2	1	1
33	45	3	9.5	4.6	4.9	9.7	4.8	5.3	0.6	0.6	3	3	2	2	1	2
34	51	8	9.3	3.7	4.2	9.3	3.8	4.2	0.4	0.4	3	3	1	1	1	2
35	48	2	10	4.8	5.2	10.4	5.2	5.6	0.8	0.8	3	3	1	1	2	2
36	53	2.6	10.4	3.7	4.2	10	3.7	4.3	0.6	0.6	3	3	1	1	2	2
37	55	10	7.5	2.8	3.4	7.7	3	3.5	0.2	0.2	2	2	2	2	1	2
38	51	2	9.8	4.5	4.9	10	4.7	5	0.7	0.8	3	3	2	2	2	2
39	50	0.6	9.7	4.3	4.7	9.8	4.4	4.7	0.7	0.7	3	3	2	2	1	2
40	48	3	9.8	4.4	4.9	10	4.5	4.9	0.7	0.7	3	3	2	2	1	2
41	52	1.5	10.2	4.7	5.3	11	5	5.4	0.8	0.8	3	3	2	2	1	2
42	46	4	9.4	4	4.5	9.6	4.3	4.8	0.5	0.5	3	3	2	2	2	2
43	49	2	10.4	4.6	5.1	10.7	4.8	5.4	0.7	0.7	3	3	2	2	1	2
44	51	5	9.4	3.6	4	9.5	3.6	4.1	0.5	0.5	3	3	2	2	1	2
45	53	6.2	9	3.1	3.5	9.3	3.2	3.7	0.4	0.4	3	3	1	1	2	2
46	47	0.8	11	4.6	5	11.2	4.8	5.3	0.8	0.8	3	3	2	2	1	2
47	54	3.2	10.2	3.9	4.6	10.5	4	4.7	0.7	0.7	3	3	2	2	1	2
48	49	2.5	10	3.9	4.5	10.3	4	4.5	0.7	0.7	3	3	2	2	2	2
49	51	4	9.8	3.6	4	9.8	3.5	4	0.5	0.5	3	3	2	2	1	2
50	47	1.8	11	4.8	5.2	12	5	5.6	0.9	1	3	3	2	2	1	2

ECHOGENISTY: 1=hyperechogenicity, 2= hypoechogenic, 3=NORMAL

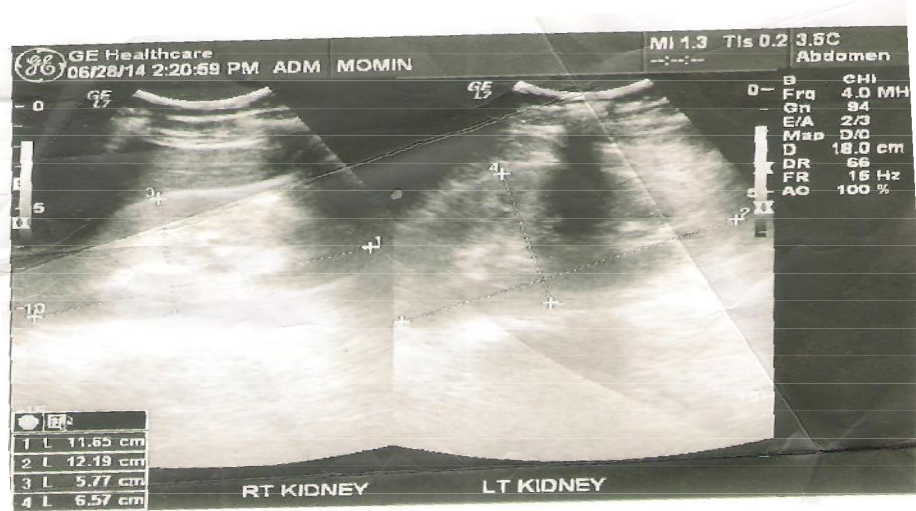
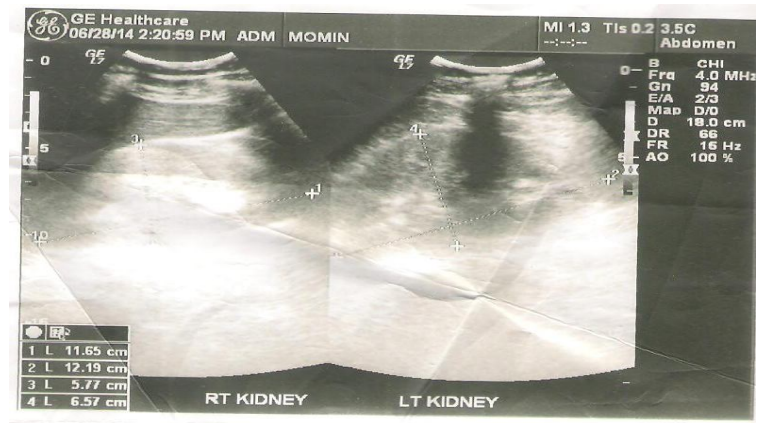
Shape: 1= regular, 2= irregular

Ratio: 1=good, 2= poor

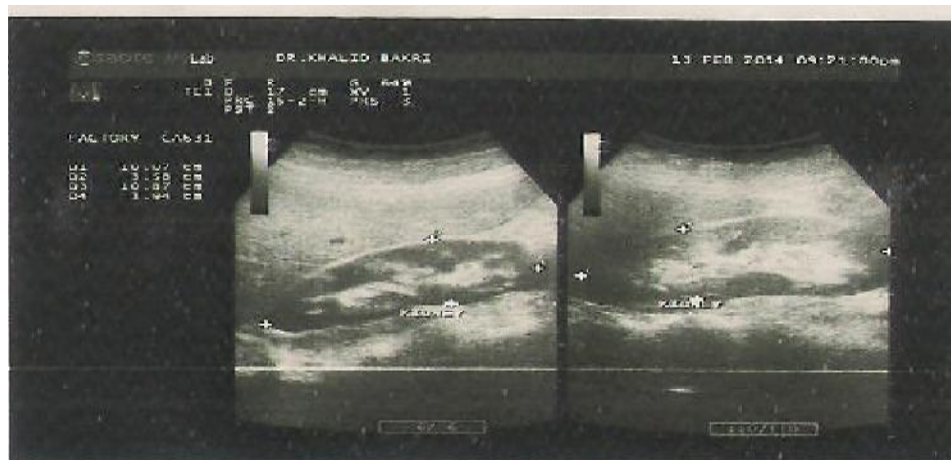
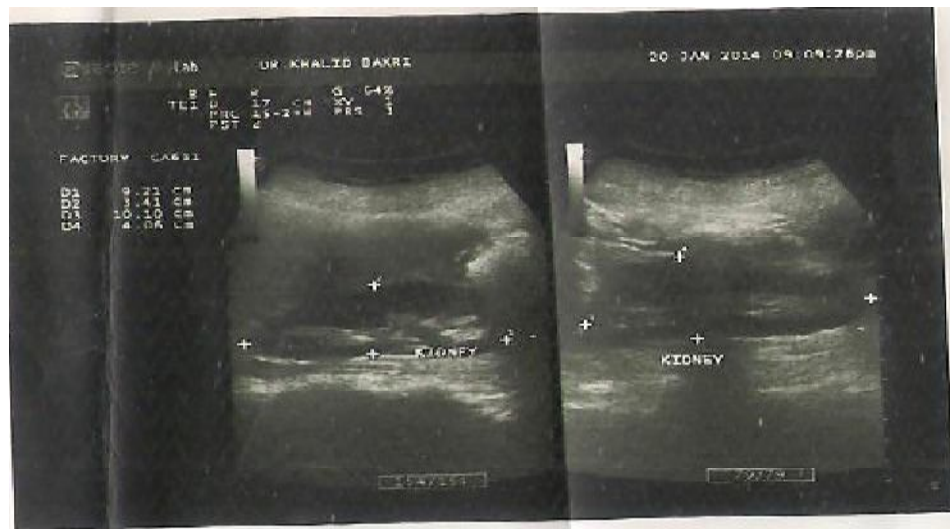
GENDER: 1= male,2 = female

Diabetic medication type: 1= medication -dependent, 2 = NON medication - depredate

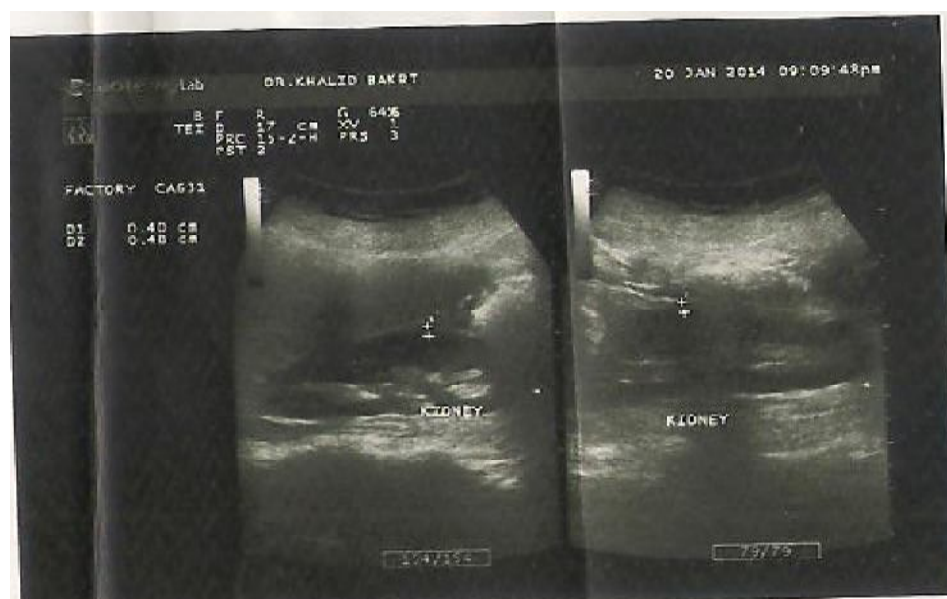
Appendix 2

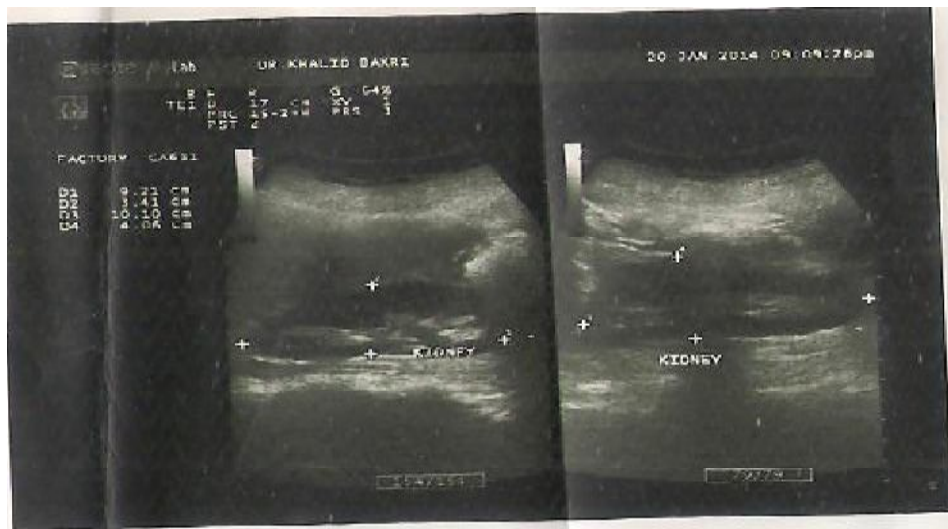


Volume of RT & LT kidney

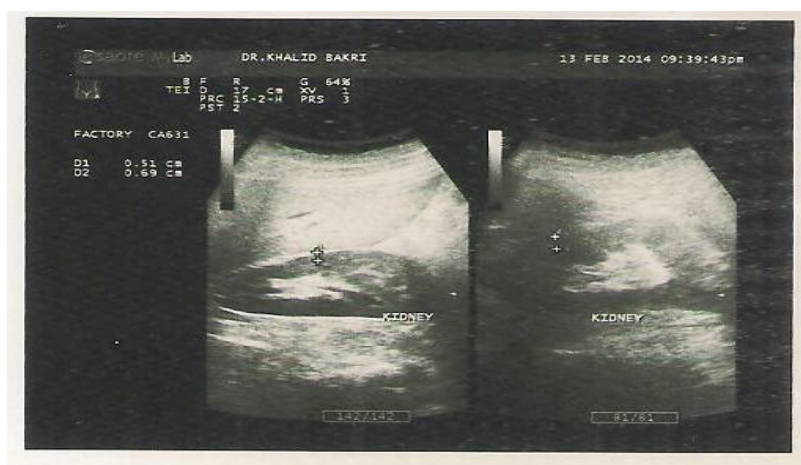


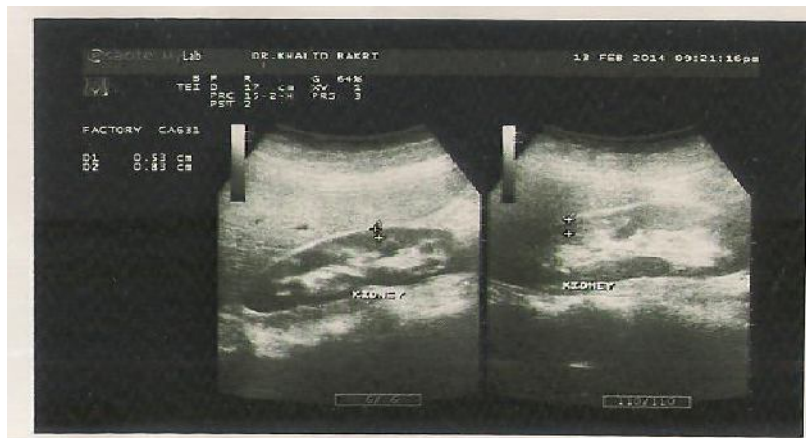
Volume measurement of RT & LT kidney



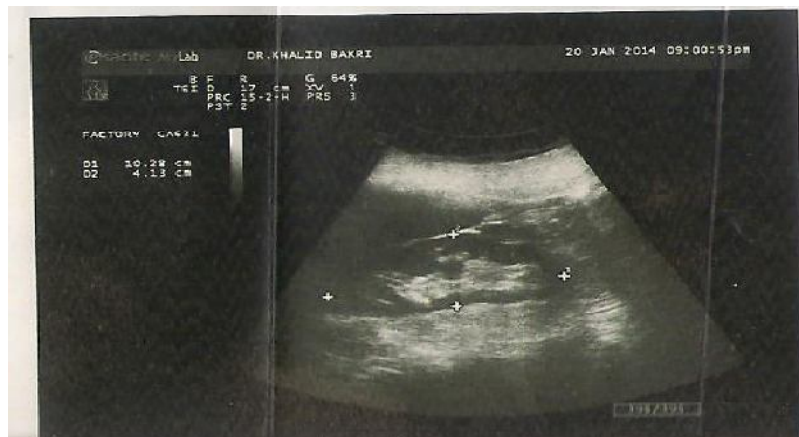


Volume measurement of RT & LT kidney



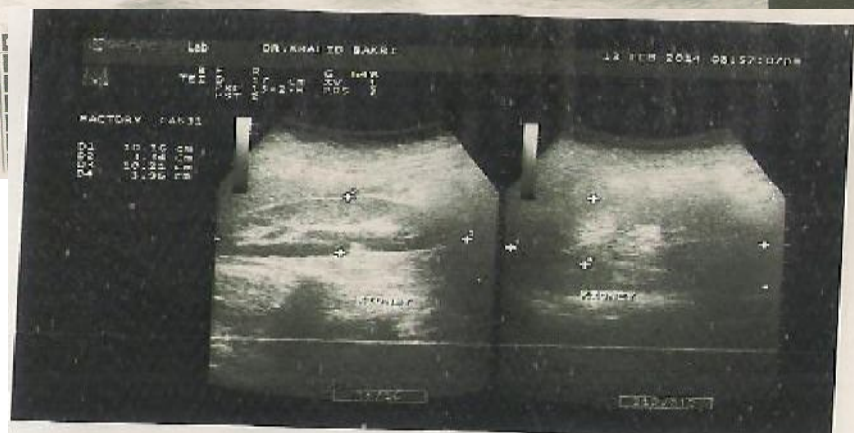
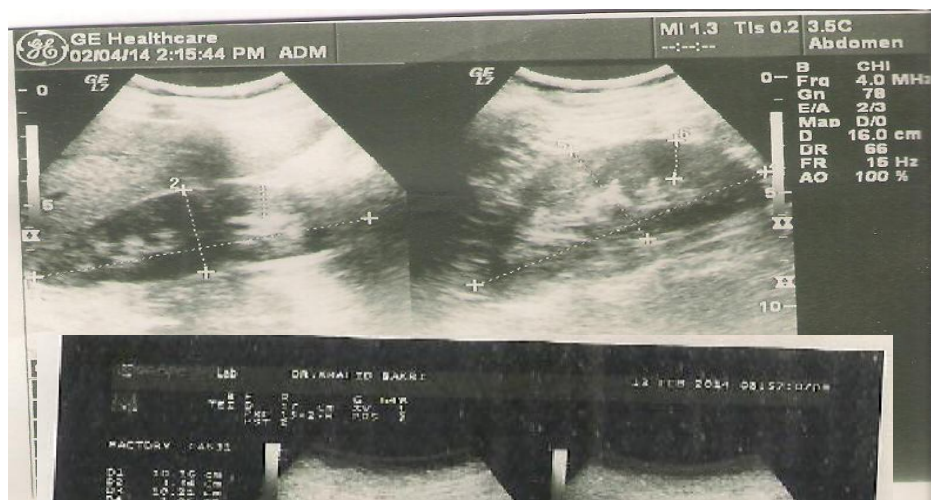


CMT measurement in RT & LT kidney

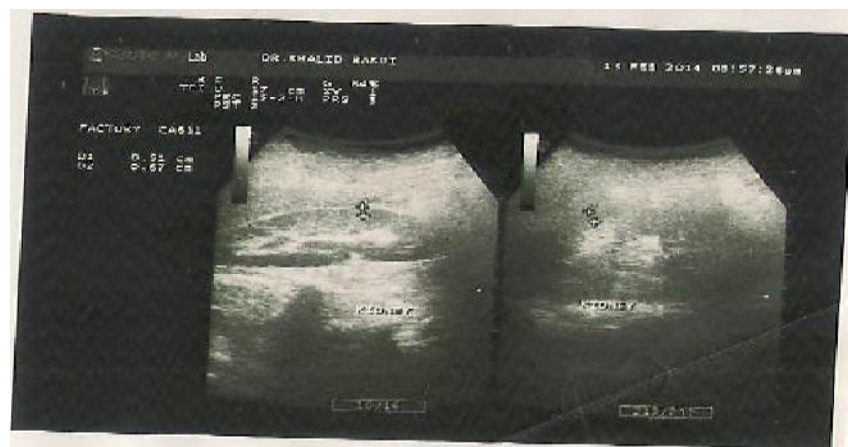


the right kidney

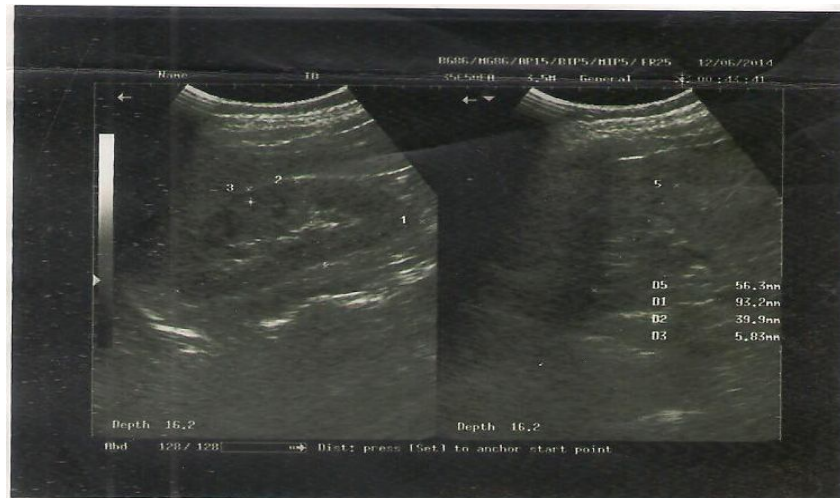
Length of



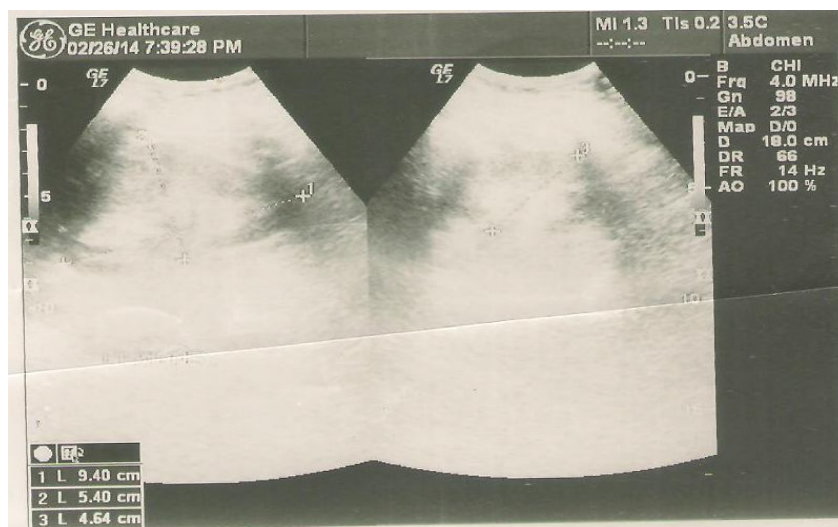
&
of

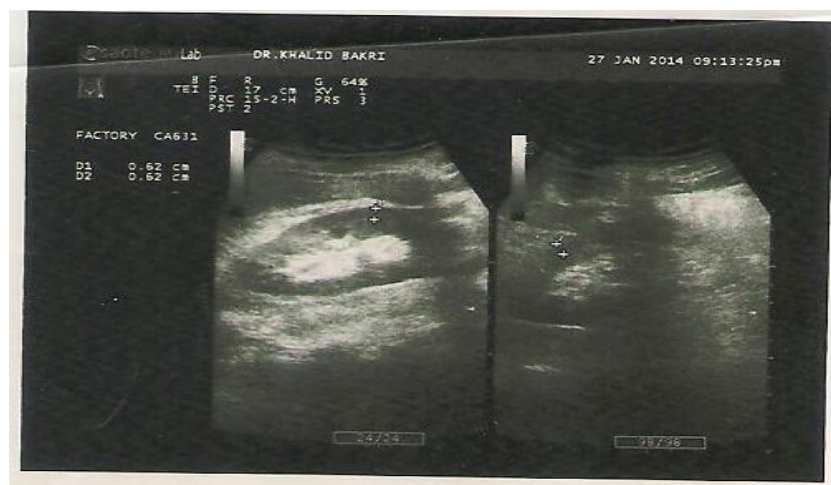


Length
width
both
kidneys

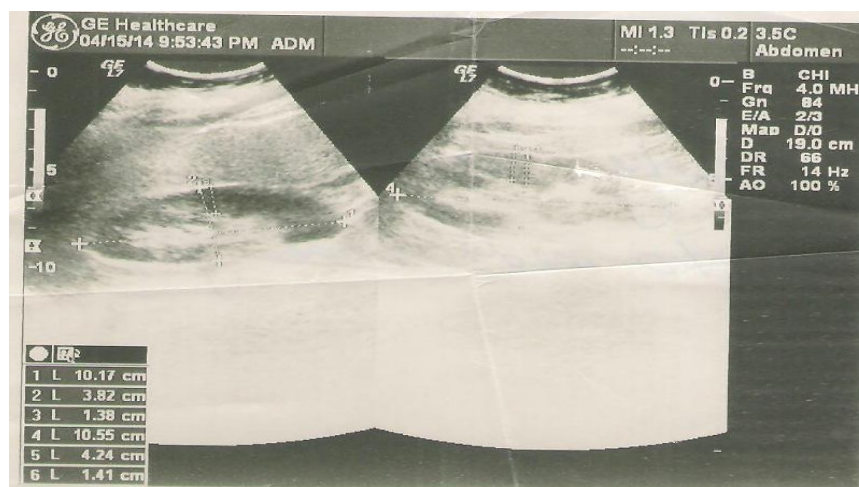


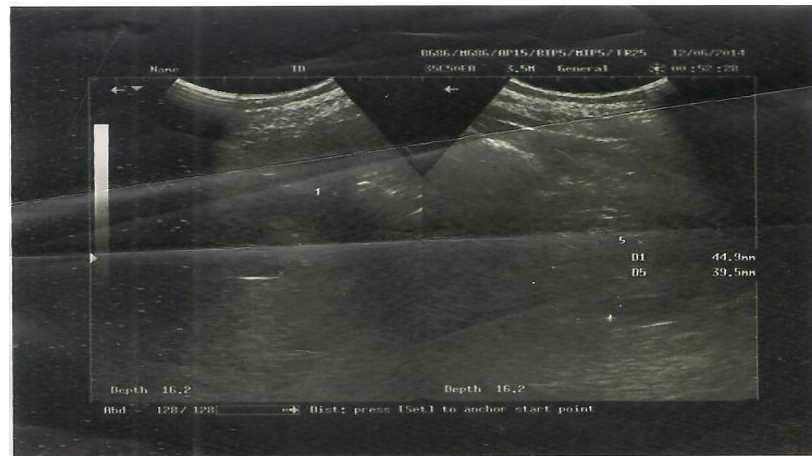
CMT measurement of the RT & LT kidney





CMT measurement of RT & LT kidney





Volume measurement of RT& LT kidney

