

Chronic Kidney Disease (CKD) Patient

Patient Overview

Mrs. M, a 64-year-old Indian female, was diagnosed with **Chronic Kidney Disease (CKD)** and has been undergoing **comprehensive CRT** treatment since February 2020.

Treatment Timeline

- **CRT-REDOX** initiated: 13 February 2020

Current Status

Mrs. M continues to receive ongoing **CRT-REDOX** treatment. Her kidney function has demonstrated measurable improvement and remains stable, with consistent positive clinical outcomes maintained throughout the treatment period.

Treatment Documentation

The following tables provide a comprehensive record of treatment visits, dosing schedules, and clinical progress:

AB REGIME	CRT-LUMINA X	CRT-REDOX X	CRT-REDOXIL X	FBC + SWAB CS	FRT	LAB TEST X	UFEME + U-CS	VAT					
Type of Immunisation	DOSE 1	DOSE 2	DOSE 3	DOSE 4	DOSE 5	DOSE 6	DOSE 7	DOSE 8	DOSE 9	DOSE 10	DOSE 11	DOSE 12	
1-C	13/02/20	20/02/20	27/02/20	21/03/20	25/03/20	31/03/20	07/04/20	26/06/20	10/09/20	03/12/20	23/12/20	30/12/20	
2-C	15/01/21	20/01/21	27/01/21	10/02/21	12/03/21	19/03/21	09/04/21	16/04/21	23/04/21	07/05/21	20/05/21	02/09/21	
3-C	15/09/21	30/09/21	28/10/21	11/11/21	25/11/21	09/12/21	06/01/22	20/01/22	03/02/22	03/03/22	01/04/22	05/05/22	
4-C	13/07/22	03/10/22	15/12/22	16/03/23	01/06/23	17/07/23	05/10/23	05/06/24	29/08/24	01/07/25	28/07/25	12/01/26	
5-C	23/04/26	30/07/26											

Table 1.1: CRT-REDOX Treatment Record

centre	ARH	KDK-QD	KDK-QD	KDK-QD	KDK-CP	KDK-CP	GN
test	20.02.19	13.02.20	21.03.20	21.04.20	11.06.20	27.07.20	Normal Range
UREA	29	7	9.2	7.6	10.2	5.9	2.8-7.2
CREATININE	1.0	139	161	173	163	132	45-84
e-GFR	48	36	30	28	28	36	>60
URIC ACID	-	264	197	174	0.23	0.30	155-357
SODIUM	137	144	127	134	138	138	136-146
POTASSIUM	4.6	-	-	6.2	8.2	5.2	3.5-5.1
CHLORIDE	103	98	93	97	100	99	101-109
CALCIUM	-	2.5	-	2.41	-	-	2.20-2.65
CORRECTED CALCIUM	-	2.5	-	2.41	-	-	2.1-2.6
PHOSPHORUS	-	1.25	-	1.42	-	-	0.81-1.45
MAGNESIUM, SERUM	-	-	-	-	-	-	0.77-1.03
Urine Albumin	-	20	-	-	-	-	< 20
Urine Creatinine	-	1.42	-	-	-	-	0.9-26.5
ACR	-	14.08	-	-	-	-	<3.4
UTI Status	+VE	+VE	-	-	-	-	
CRT-REDOX+	-	D1	D3	D7	-	D8	
CRT-LIPON	-	-	-	-	-	-	
CRT-LUMINA	-	-	-	-	-	-	
centre	KDK-CP	SKMC	KDK-CP	KDK-CP	KDK-CP	KDK-CP	GN
test	10.09.20	28.09.20	06.10.20	02.12.20	23.12.20	27.01.21	Normal Range
UREA	10.0	4.3	6.8	7.9	6.5	7.1	2.8-7.2
CREATININE	148	112	106	128	114	118	45-84
e-GFR	31	-	46	37	42	41	>60
URIC ACID	0.32	-	0.22	0.24	0.23	0.24	155-357
SODIUM	135	137	137	134	133	133	136-146
POTASSIUM	5.2	5.1	5.1	4.5	5.2	5.2	3.5-5.1
CHLORIDE	93	102	103	95	96	95	101-109
CALCIUM	-	-	-	-	-	-	2.20-2.65
CORRECTED CALCIUM	-	-	-	-	-	-	2.1-2.6
PHOSPHORUS	-	-	-	-	-	-	0.81-1.45
SERUM	-	-	-	-	-	-	0.77-1.03
Urine Albumin	-	-	-	-	-	-	< 20
Urine Creatinine	-	-	-	-	-	-	0.9-26.5
ACR	-	-	-	-	-	-	<3.4
UTI Status	-	+VE	-	-	-	-	
CRT-REDOX+	D8	D9	-	-	D10	D14	
CRT-LIPON	-	-	-	-	-	-	
CRT-LUMINA	D1	-	-	-	-	-	

Table 2.1: Real-Time Laboratory Results (Part 1)

centre	KDK-CP	KDK-CP	KDK-CP	KDK-CP	SKMC	KDK-GB	GN
test	19.03.21	03.05.21	04.06.21	28.06.21	12.07.21	02.09.21	Normal Range
UREA	6.0	8.2	6.7	10.8	6.1	8.4	2.8-7.2
CREATININE	125	147	119	275	127	155	45-84
e-GFR	38	32	40	15	-	31	>60
URIC ACID	0.30	0.32	0.26	0.35	-	0.28	155-357
SODIUM	137	139	137	133	134	136	136-146
POTASSIUM	5.3	5.2	5.2	4.2	5.8	6.8	3.5-5.1
CHLORIDE	100	101	100	95	99	95	101-109
CALCIUM	2.3	-	-	-	-	2.52	2.20-2.65
CORRECTED CALCIUM	2.4	-	-	-	-	2.50	2.1-2.6
PHOSPHORUS	1.0	-	-	-	-	1.63	0.81-1.45
MAGNESIUM, SERUM	-	-	-	-	-	-	0.77-1.03
Urine Albumin	-	-	-	-	-	-	< 20
Urine Creatinine	-	-	-	-	-	-	0.9-26.5
ACR	-	-	-	-	-	-	<3.4
UTI Status	-VE	-	-	-	-	-	
CRT-REDOX+	D17	D21	D21	D21	-	D23	
CRT-LIPON	-	-	D1	D2	-	-	
CRT-LUMINA	-	-	-	-	-	-	
centre	KDK-GB	KDK-GB	KDK-GB	KDK-GB	KDK-GB	KDK-GB	GN
test	15.09.21	28.10.21	09.12.21	20.01.22	03.03.22	01.04.22	Normal Range
UREA	6.2	7.5	6.2	8.3	8.6	7.2	2.8-7.2
CREATININE	155	139	151	144	149	146	45-84
e-GFR	31	36	32	34	33	34	>60
URIC ACID	0.25	0.27	0.26	0.26	0.28	0.27	155-357
SODIUM	136	132	132	138	136	141	136-146
POTASSIUM	-	4.8	-	5.4	5.7	-	3.5-5.1
CHLORIDE	99	95	97	95	94	100	101-109
CALCIUM	-	2.11	-	-	-	-	2.20-2.65
CORRECTED CALCIUM	-	2.11	-	-	-	-	2.1-2.6
PHOSPHORUS	-	1.12	-	-	-	-	0.81-1.45
MAGNESIUM, SERUM	-	-	-	-	-	-	0.77-1.03
Urine Albumin	11.6	10.6	18.6	6.6	8.6	8.7	< 20
Urine Creatinine	2.18	2.94	7.38	3.44	3.97	4.26	0.9-26.5
ACR	5.3	3.6	2.5	1.9	2.2	2.0	<3.4
UTI Status	-	+VE	+VE	+VE	+VE	+VE	
CRT-REDOX+	D24	D26	D29	D31	D33	D34	
CRT-LIPON	-	-	-	-	-	-	
CRT-LUMINA	-	-	-	-	-	-	

Table 2.2: Real-Time Laboratory Results (Part 2)

centre	KDK-GB	KDK-INNO	KDK-GN	KDK-GN	KDK-GN	KDK-GN	GN
test	05.05.22	13.07.22	03.10.22	09.03.23	17.07.23	05.10.23	Normal Range
UREA	6.1	6.3	7.7	7.9	7.5	6.5	2.8-7.2
CREATININE	135	118	122	130	118	115	45-84
e-GFR	37	43	41	38	43	42	>60
URIC ACID	0.24	0.20	277	276	273	252	155-357
SODIUM	135	140	135	140	141	136	136-146
POTASSIUM	6.8	5.4	5.1	5.5	5.0	6.2	3.5-5.1
CHLORIDE	95	99	103	101	103	100	101-109
CALCIUM	2.25	-	-	2.47	2.37	-	2.20-2.65
CORRECTED CALCIUM	2.29	-	-	2.5	2.4	-	2.1-2.6
PHOSPHORUS	1.11	-	-	1.39	1.53	-	0.81-1.45
MAGNESIUM, SERUM	-	-	-	0.65	0.60	-	0.77-1.03
Urine Albumin	6.7	7.2	12.9	16.4	18.9	13.2	< 20
Urine Creatinine	1.50	1.90	1.6	4.0	3.0	2.7	0.9-26.5
ACR	4.5	3.8	8.1	4.1	6.3	4.9	<3.4
UTI Status	+VE	+VE	+VE	+VE	+VE	-VE	
CRT-REDOX+	D35	D36	D38	D40	D41	D42	
CRT-LIPON	-	-	-	-	-	-	
CRT-LUMINA	-	-	-	-	-	-	
centre	KDK-GN	KDK-GN	KDK-GN	KDK-GN			GN
test	05.06.24	01.07.25	23.04.26	30.07.26			Normal Range
UREA	-	6.5	4.0	4.9			2.8-7.2
CREATININE	-	104	113	96			45-84
e-GFR	-	52	47	57			>60
URIC ACID	-	331	236	273			155-357
SODIUM	-	134	137	138			136-146
POTASSIUM	-	4.8	5.0	5.1			3.5-5.1
CHLORIDE	-	97	100	98			101-109
CALCIUM	-	2.42	2.46	2.56			2.20-2.65
CORRECTED CALCIUM	-	2.4	2.4	2.4			2.1-2.6
PHOSPHORUS	-	1.07	1.27	1.28			0.81-1.45
MAGNESIUM, SERUM	-	0.55	0.79	0.62			0.77-1.03
Urine Albumin	33.8	40.8	54.7	125.2			< 20
Urine Creatinine	2.3	1.4	1.2	1.2			0.9-26.5
ACR	14.7	29.1	45.6	104.3			<3.4
UTI Status	-	-VE	+VE	+VE			
CRT-REDOX+	D43	D45	D48	D49			
CRT-LIPON	-	-	-	-			
CRT-LUMINA	-	-	-	-			

Table 2.3: Real-Time Laboratory Results (Part 3)

e-GFR categories in CKD

GFR category	GFR (ml/min/1.73 m ²)	Terms
G1	> 90	Normal / High
G2	60 - 89	Mildly decreased
G3a	45 - 59	Mildly to moderately decreased
G3b	30 - 44	Moderately to severely decreased
G4	15 - 29	Severely decreased
G5	< 15	Kidney failure

Urine MicroAlbumin

Male - 2.5 - 25.0 mg/mmol

Female - 3.5 - 25.0 mg/mmol

*value >25.0 are indicative of macroalbuminuria
and/or probably overt proteinuria

Table 3: Indicator for e-GFR and Urine Microalbumin