

ADULT DENGUE PATIENT MONITORING

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CONTENTS

- ❖ Febrile Phase monitoring chart.
- ❖ Indications to Call For Immediate Advice.
- ❖ Critical phase monitoring chart.

Why Is It Necessary to Monitor Dengue Patients?

- Identify the commencement of critical phase.
- Identify early shock.
- As a guide for fluid management.



Dengue Monitoring

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graph TD; A[Dengue Monitoring] --> B[Febrile Phase Monitoring]; A --> C[Critical Phase Monitoring];
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Febrile Phase
Monitoring

Critical Phase
Monitoring

Parameters to be Checked During Febrile Phase

- ✓ Body Temperature
- ✓ Pulse Rate , Pulse Volume
- ✓ Respiratory Rate
- ✓ Blood Pressure
- ✓ Pulse Pressure
- ✓ CRFT
- ✓ PCV
- ✓ Platelet Count
- ✓ WBC
- ✓ IP/OP



Indications to Call for Immediate Advice

1. Pulse Rate

- $>120/\text{min}$ with fever
- $>100/\text{min}$ with out fever



Indications to Call for Immediate Advice

2. Pulse pressure 20mmHg-25mmHg or less (In supine Position)

3. Postural Drop of SBP >20mmHg



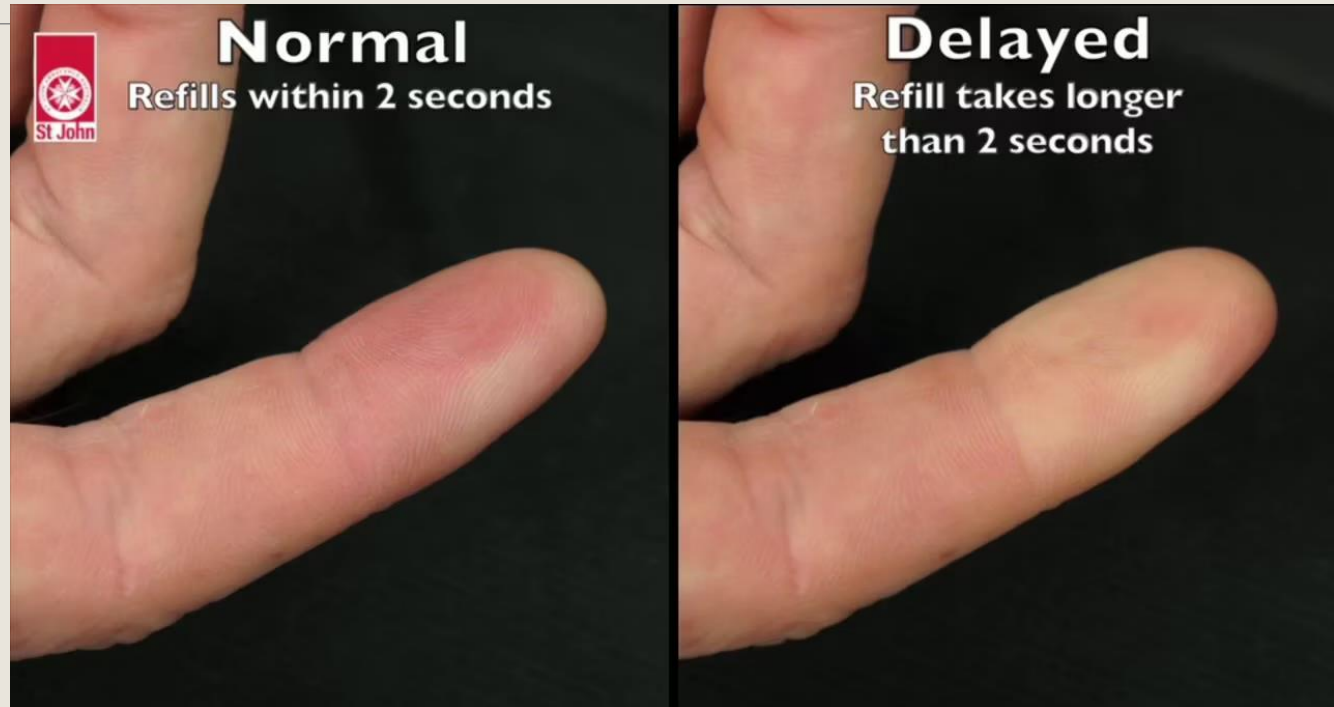
During the reading

- No talking
- Arm resting at chest height
- Cuff against bare skin
- Back is supported
- Sit with feet flat on floor

Visit [cdc.gov/bloodpressure](https://www.cdc.gov/bloodpressure) for tips and resources.



4. CRFT > 2sec



5. UOP < 0.5ml/kg/hr

- Confirm patients body weight.
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If Patient's body weight,

- > 50kg - Fluid should be calculated to the ideal body weight (50Kg).
- < 50Kg - Fluid should be calculated to the actual body weight.

6. PCV rise of >10% from the baseline.

- If the PCV rising;
 - 20% - patient is in leaking phase
 - 30% - patient may be in shock.

7. Significant bleeding (Hematemesis, Malena, Bleeding PV etc.)

- Dropping PCV from baseline. (Even without obvious reason)



Monitoring should be started at plt. Count of $<130,000/\text{mm}^3$

Name of patient: Mr. G. Perera	Age: 45 yrs	BHT No: 31075	Indications to call for immediate advice i) Pulse rate > 120/min with fever or >100/min without fever. ii) Pulse Pressure 20mmHg-25mmHg or less (In supine position) iii) Postural drop of SBP >20mmHg. iv) Significant bleeding (Haemetemesis, Malaena, Bleeding PV etc.) v) UOP <0.5ml /Kg/hr vi) CRFT > 2 sec vii) PCV rise of >10% from the baseline.
Date & Time of admission: 04/08/2023 4pm		Ward: 5A	
Duration of fever: 3 days		Weight: 56 kg	
Baseline PCV % : 34%			

[illegible]

Date	Time	PR /min	BP mmHg (Supine)	Pulse Pressure (Supine)	BP mmHg (Sitting)	CRFT	RR (pm)	PCV %	Plt /mm ³	WBC (Total)
04/08	4 PM	80/min	100/70	30	112/68	< 2 sec	20/min	34%	125	9.8
	7 PM	78/min	110/80	30	100/68	< 2 sec	18/min			
	10 PM	84/min	110/70	40	114/68	< 2 sec	16/min	33%		
05/08	1 AM	80/min	100/60	40	100/70	< 2 sec	18/min			
	4 AM	76/min	100/70	30	110/70	< 2 sec	20/min	35%		
	7 AM	80/min	100/68	32	100/60	< 2 sec	14/min		90	1.4
	10 AM	82/min	110/70	40	112/68	< 2 sec.	18/min	38%		

PCV Rising Dropping Platelet count



Dropping WBC counts

PCV Rising Dropping Platelet counts

Dropping Platelet counts

Indications of Entering into Critical Phase from febrile phase

- Settling of fever
- Rising of PCV
- Decreased UOP ($< 0.5\text{ml/kg/hr}$)
- Dropping WBC Counts
- Platelet Count $< 100,000 /\text{mm}^3$
- Reversal of Neutrophil/Lymphocyte ratio
- USS evidence of leakage (Ascites/Pleural effusion)

CRITICAL PHASE

Critical Phase Monitoring Chart

- Consist of two pages.
- Monitoring scheduled for 48hrs.
- Each page monitors for 24hrs.
- Monitor Same parameters as in the febrile phase monitoring chart. But Monitoring frequency will be hourly.
- PCV monitoring 3hrly.

	Oral
	N.Saline
	40%Dextran
	Tetrastarch
	Blood(in red)
	Other

Do PCV 3 hrly or more frequently. Monitor other parameters 1hrly & if in shock more frequently, until patient is stable.

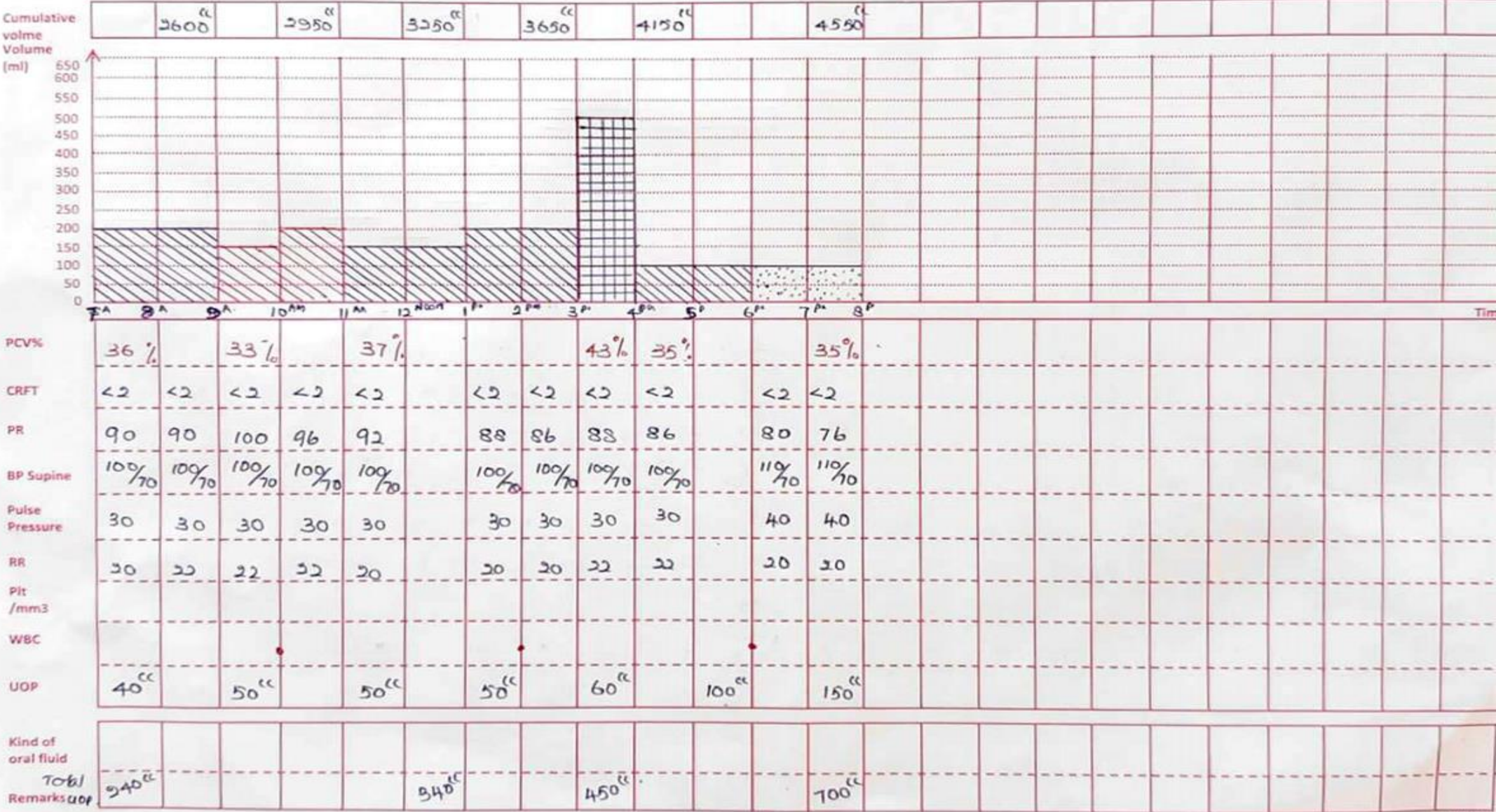
Record the amount and type of fluids.

	Time (hrs)
PCV%	
CRFT	
PR	
BP Supine	
Pulse Pressure	
RR	
Plt /mm ³	
WBC	
UOP	
Kind of oral fluid	
Remarks	

Monitor parameters
- 1hrly.

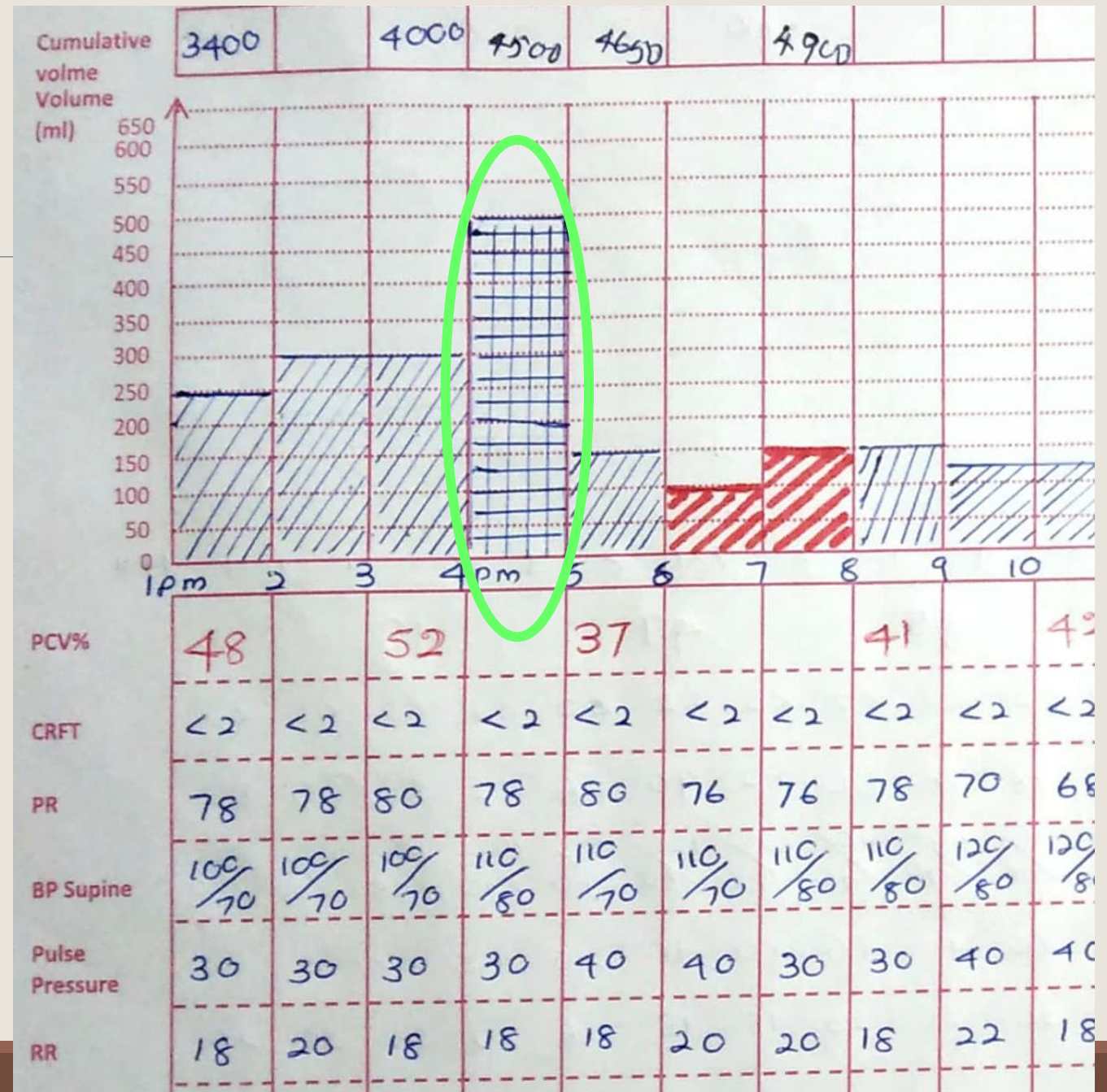
Measure UOP
2hrly

Recorded Critical Phase Monitoring Chart



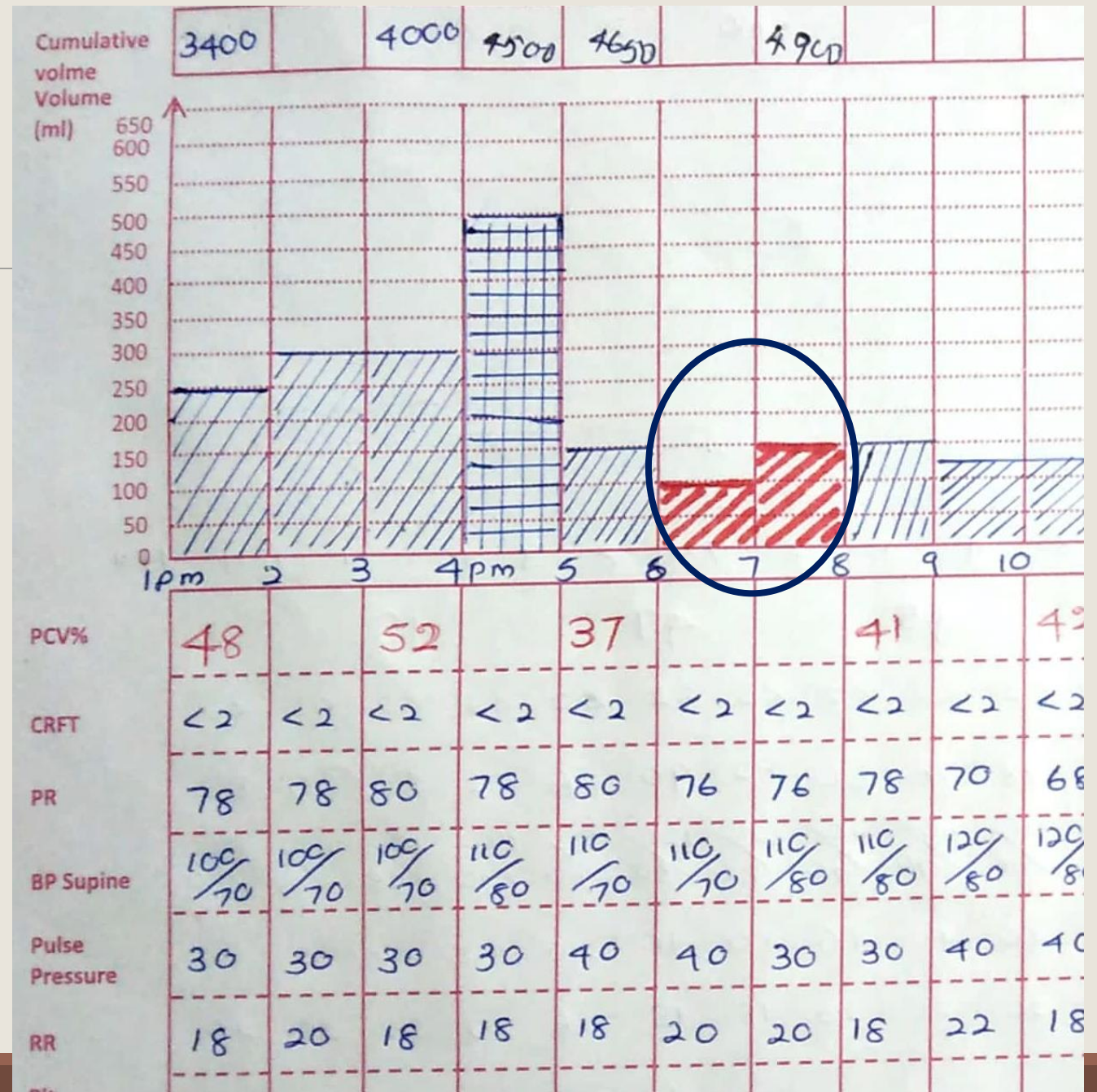
Dextran Administering

- Administration of 40% dextran bolus 10ml/Kg/hr.
- After the bolus check PCV in 30 minutes.
- Expected PCV drop 8-10.



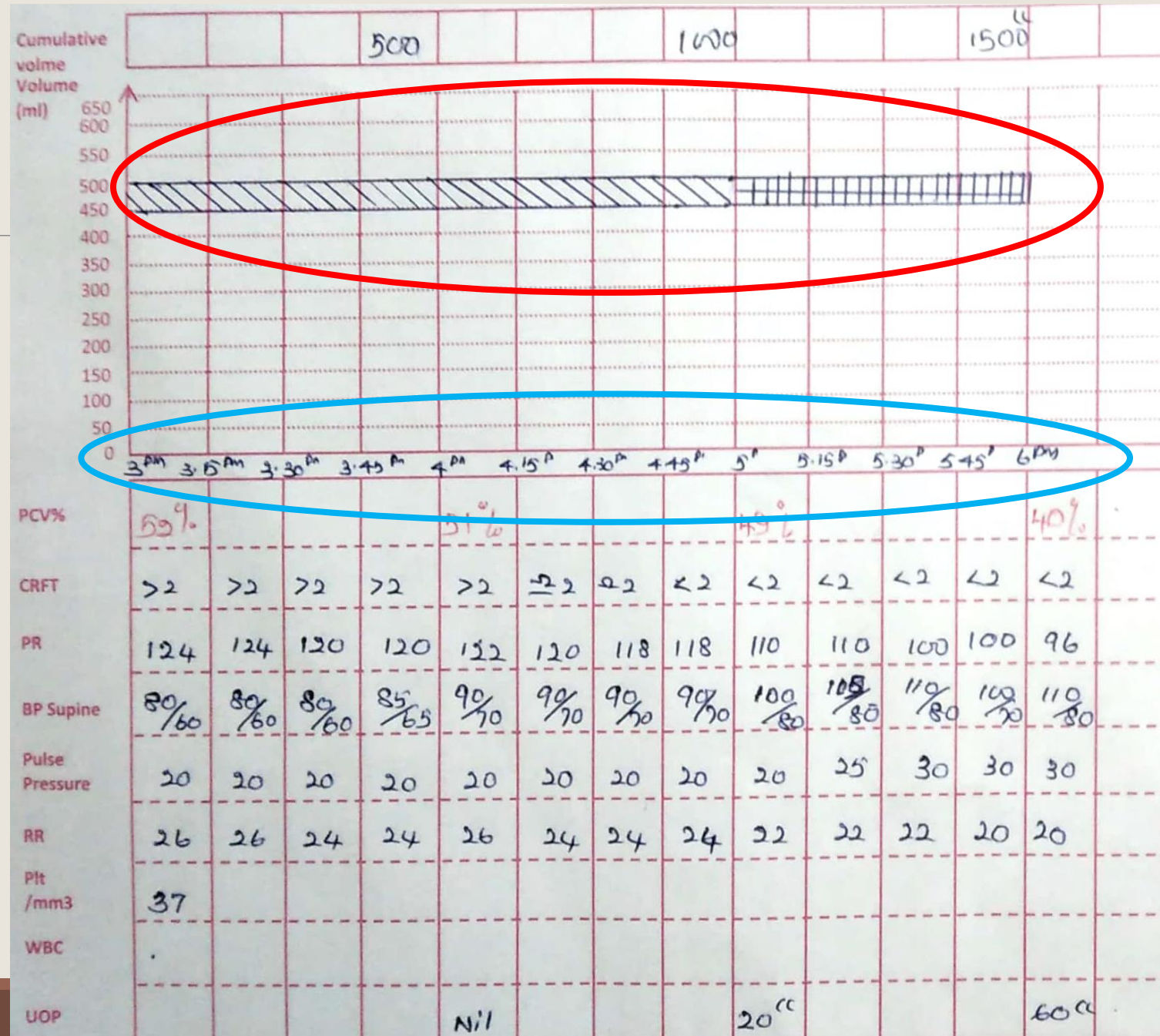
Blood transfusion

- Transfuse blood as 5ml/Kg/hr.
- Do a PCV 30 minutes after the transfusion.
- Expected PCV rise 3-5.



If Patient is in Shock;

- Administer O₂ as soon as possible.
- monitoring parameters 15 min apart.



Advantages of critical phase monitoring chart

- Early detection of shock.
- As a guide for fluid management.
- Identify complications.

Eg: Bleeding

Fluid overload

Why we should emphasize monitoring ?

Early detection & Prevent Complications.



**Prevent death
& Save a life**



THANK YOU...

