

Catastrophic outcome of a HELLP syndrome

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Introduction

HELLP syndrome is a severe preeclampsia complication that requires hospital management due to pregnancy ending or, in selected cases, observation and clinical control.

Case

37.4 weeks pregnant women (P 1 G 3), no relevant medical history, presents in emergency room with upper abdominal pain and vomits.

Differential diagnose focuses on preeclampsia and digestive illness.

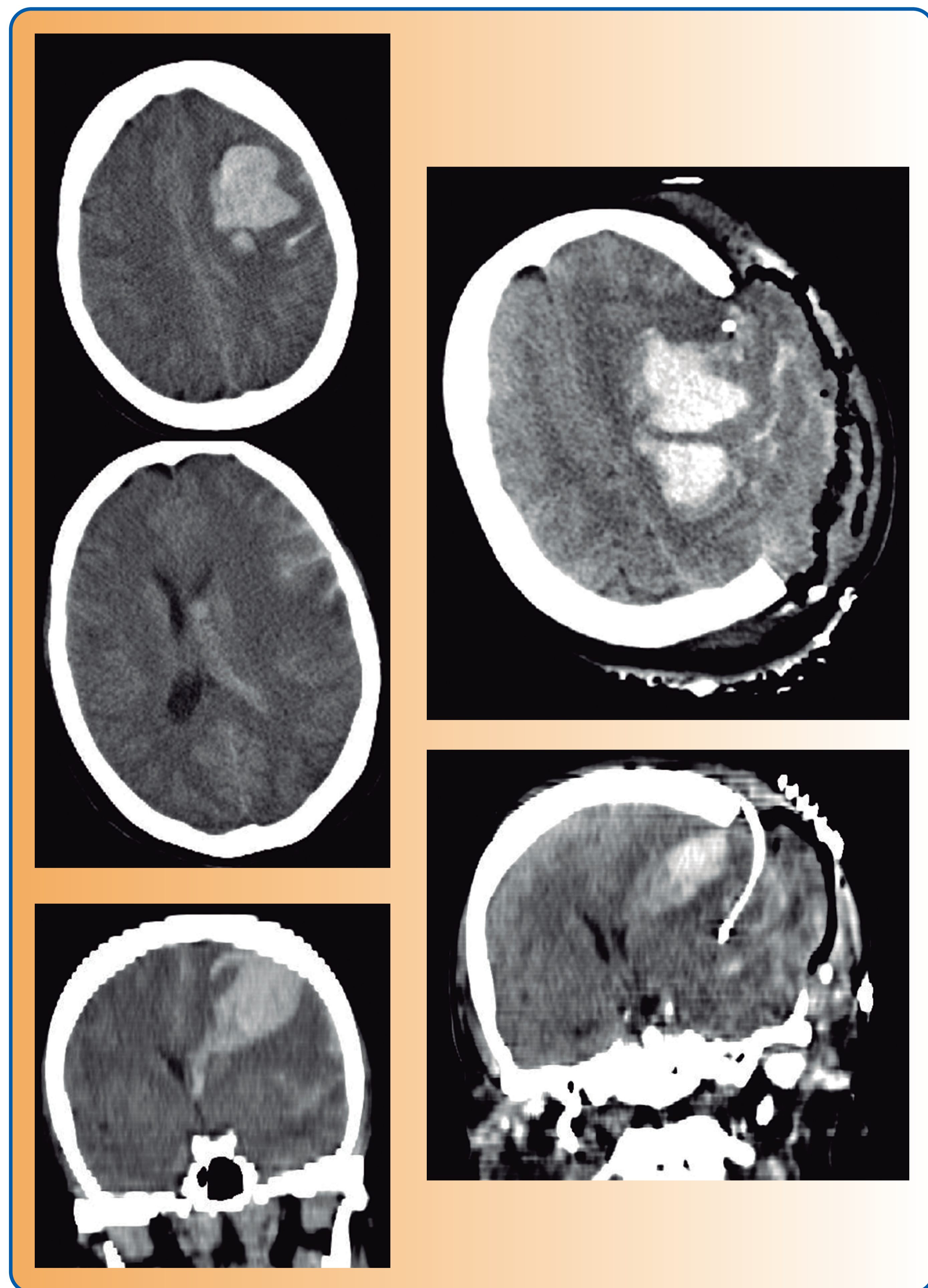
Final diagnose results in severe preeclampsia and i.v. Magnesium sulfate perfusion is started, as labetalol. Induction of labour is indicated at that point.

During the induction the patient suffers a sudden loss of consciousness and an emergent cesarean section is performed, after stabilization of the patient and under general anesthesia.

After surgery patient is extubated and once awake presents Galsgow 8 and right hemiplegia, CT scan shows a large fronto-parietal brain hematoma with loss of medial brain line.

At that point hemodynamic stabilization is tried but almost all measures fail, even blood transfusion. Patient enters into oliguria and vaginal bleeding starts. As a last treatment effort a hemy-craniectomy to decompress brain swelling is indicated, and massive blood transfusion as vasoactive drugs are started.

New CT scan shows active brain bleeding, signs of high intracranial pressure and brain base ischemia. Anisocoria and haemodinamical instability persist. Due to bad prognosis, aggressive life support measures are stopped and we just provide comfort measures. Finally patient dies within minutes.



Parameters	first blood test	3:00 AM	5:00 AM	10:00 AM	11:00 AM	3:00 PM	9:00 PM
Creatinine (mg/dL)	0,63				1,51		
Na+ (mmol/L)	134,8					131,5	
K+ (mmol/L)	3,6					5,17	
Cl- (mmol/L)	101,7					100,6	
Lactic acid (mmol/L)	2,6				3,6	3,7	6,7
Total bilirubin (mg/dL)	0,16				2,08		
AST (UI/L)	83				1375		556
ALT (UI/L)	58				348		148
Alcalina fosfatase (UI/L)	175				100		
Hb (g/dL)	13,6		9,1	7,5	9,2	7,9	5,6
Ht (%)	38,7		25,7	22,5	27,5	23,1	16,2
Leukocyte (/μL)	11910		8450	7040	9680	12770	18030
Neutrophil (%)	43,2		79,6	81,3	89,6	86,1	82,5
Platelets (/μL)	161000		31000	66000	104000	85000	199000
PT (%)	120		65		76	87	78
TPAT (s)	25,7		30,5		30,8		33,6
INR	0,85		1,36		1,21	1,1	1,19
Fibrinogen (mg/dL)	376		126		133	296	138
Sporadic proteinuria (mg/dL)	513,2						
PCOR (mg/g creat.)	5831,8						
Arterial pH			7,13	7,27	7,29	7,33	7,24

Comments

Intracranial bleeding or stroke are first death cause in HELLP syndrome. Its cause remains unknown but high brain perfusion and low platelets can be involved.

References

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3. ACOG Committee on Practice Bulletins - Obstetrics. ACOG practice bulletin. Diagnosis and management of preeclampsia and eclampsia. Number 33, January 2002. Obstet Gynecol. 2002;99:159-65.

Conclusion

1-2% of pregnancies develop preeclampsia, it exceptionally evolves into HELLP syndrome with fatal outcome in spite of intensive treatment.