A Novel Case Report: Paliperidone-Induced DRESS Syndrome

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Case Presentation and Clinical Findings

- Adverse drug reactions (ADRs) are a significant challenge in clinical practice, particularly in complex cases managed by Consult Liaison Psychiatrists. Approximately 1–3% of hospitalized patients experience ADRs, making them a significant contributor to preventable morbidity and mortality while placing a heavy burden on healthcare systems (Dinulus 2020).
- This case report focuses on Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS) syndrome induced by previously administered Paliperidone interacting with subsequently administered Olanzapine, emphasizing the importance of proactive monitoring and interdisciplinary care.

- A 58-year-old female with a history of anxiety, depression, psychosis, lymphedema, recurrent cellulitis, and eczema developed a severe dermatological reaction after increasing her Paliperidone dose.
  - Initial workup showed leukocytosis, eosinophilia, and elevated TSH.
  - Physical examination revealed widespread desquamating rashes.
- Given the temporal relationship between Paliperidone initiation and rash onset, a diagnosis of DRESS syndrome was established.

Objective

Vital Signs:

	3/17/2024 8:00 AM	3/17/2024 3:43 PM	3/18/2024 12:52 AM	3/18/2024 7:28 AM	3/18/2024 3:21 PM
Vitals					
Systolic	156	129	136	135	119
Diastolic	66	58	57	71	56
Heart Rate	94	103	97	94	89
Temp	36.6 °C (97.9 °F)	36.4 °C (97.5 °F)	37.1 °C (98.8 °F)	37.2 °C (99 °F)	37.2 °C (99 °F)
Resp	18	16	16	18	18

Time:	0242	0421	1538	1118	0552	2036	1220	1519	0642	1420
GENERAL CHEMISTRY/PANELS										
GLUCOSE				108	71			75	115	101
SODIUM				137	135			137	138	138
POTASSIUM				4.5	4.7			4.2	3.8	3.7
CHLORIDE				102	101			98	102	102
Bicarbonate				25	22			24	24	26
Anion Gap				15	17			19	16	14
Blood Urea Nitrogen				45	44			33	31	22
Creatinine				1.38	1.42			1.37	1.43	1.16
EGFR				44	43			45	43	55
Calcium				8.4	8.0			8.4	8.3	7.8
PHOSPHORUS				3.9	3.8			3.3	3.5	2.4
Albumin				2.6	2.4			3.1 3.0	2.8	2.6
Alkaline Phosphatase								107		
ALT								31		
AST								30		
Bilirubin Total								0.3		
Bilirubin, Direct								0.0		
FOLATE										
Total Protein								6.8		
MAGNESIUM				2.10	2.20				2.26	2.11
Lactate	2.3	1.7								
SPECIAL CHEMISTRY										
Vitamin B12										
ENDOCRINE										
Thyroxine, Free									0.74	0.85
Thyroid Stimulating Hormone									6.05	5.15
GLUCOSE				108	71			75	115	101
CBC AND DIFFERENTIAL										
WBC				31.8	32.0			27.3	23.0	15.2
nRBC				0.0	0.0			0.0	0.0	0.0
RBC				3.61	3.52			3.96	3.59	3.37
HEMOGLOBIN				10.3	9.7			11.3	10.4	9.2
HEMATOCRIT				31.9	31.6			35.1	30.7	29.1
MCV				88	90			89	86	86
MCH				28.5	27.6			28.5	29.0	27.3
MCHC				32.3	30.7			32.2	33.9	31.6
RED CELL DISTRIBUTION WIDTH				14.7	15.1			14.8	14.6	14.5

- Paliperidone, Olanzapine, and all psychotropic medications were discontinued.
- The patient was started on corticosteroids and antihistamines. Psychiatric medications were reintroduced cautiously to prevent further complications.
- Supportive care in the MPU ensured effective management of both psychiatric and medical need.
- Laboratory findings of leukocytosis, eosinophilia, and elevated TSH confirmed DRESS syndrome.
  - Dermatology recommended discontinuing Paliperidone and other psychotropic agents.
- A multidisciplinary team provided comprehensive care in a medicine-psychiatry unit (MPU), highlighting the importance of close collaboration in such cases.

- After discontinuing psychotropic medications and starting corticosteroids, the patient showed rapid improvement, with her skin lesions resolving and her leukocytosis normalizing.
- The case underscores the importance of early recognition of ADRs, prompt intervention, and interdisciplinary collaboration.

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