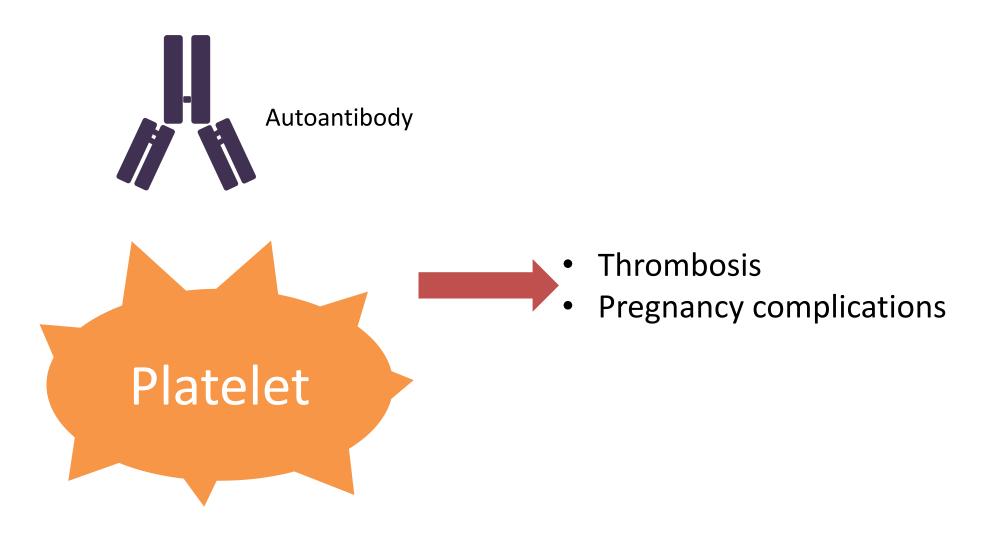
Plasma saves the day!

A successful plasma exchange in systemic lupus erythematosus with acute complications

Yik Chang Ho
Launceston Pathology
PhD candidate in UTAS investigating Lupus



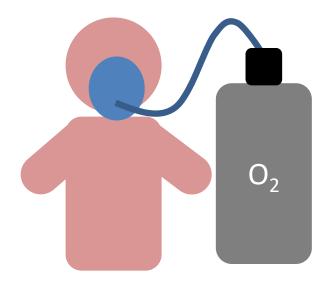
Systemic lupus erythematosus (SLE)



• Ho YC et al. Antibodies 2016;5:12-28.

Patient's History

Intensive care unit (ICU)

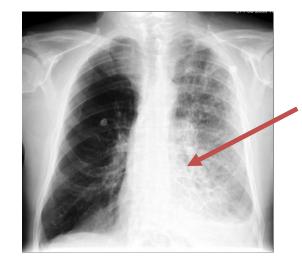


28-year-old female

Chest auscultation



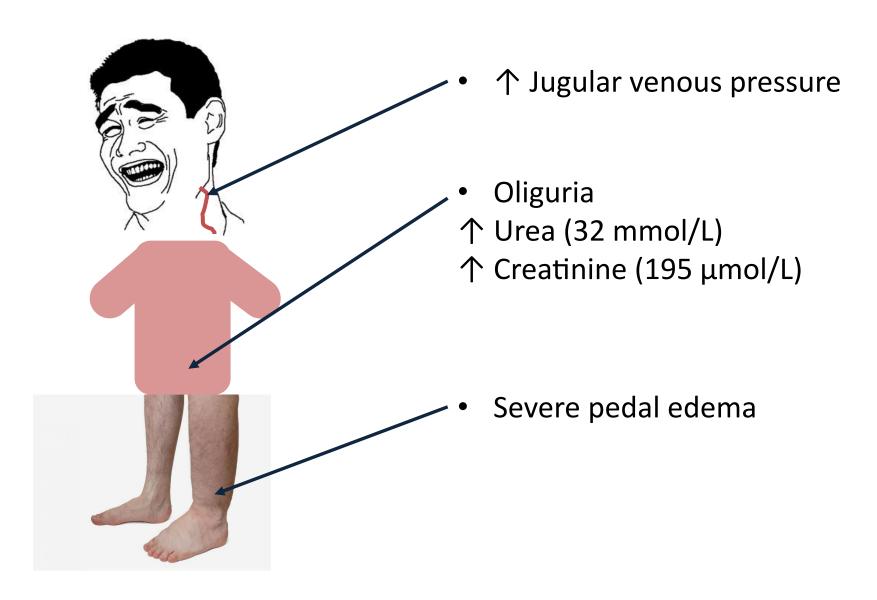
X-ray



Opacification

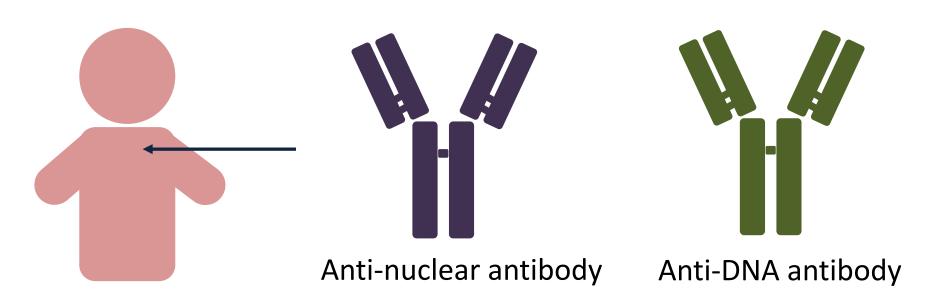
• Hans R et al. Indian Society of Critical Care Medicine 2013;17:385.

Patient's History



• Hans R et al. Indian Society of Critical Care Medicine 2013;17:385.

Diagnosis



SLE with acute pulmonary and renal complications

• Hans R et al. Indian Society of Critical Care Medicine 2013;17:385.

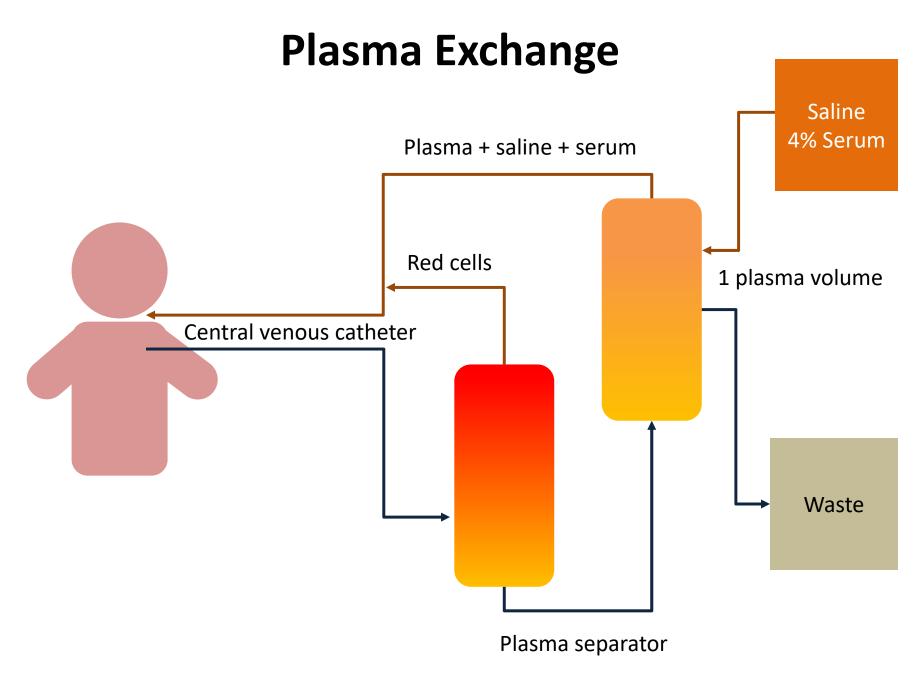
Treatment Options

- 1. Long term
 - Immunosuppressive drugs



- 2. Acute complication
 - Pulse methylprednisolone "corticosteroids"
 - Irresponsive in this case
- 3. Alternative
 - Plasma exchange

[•] Hans R et al. Indian Society of Critical Care Medicine 2013;17:385.



• Winters JL. ASH Education Program Book 2012;2012:7-12.

Patients' Outcomes

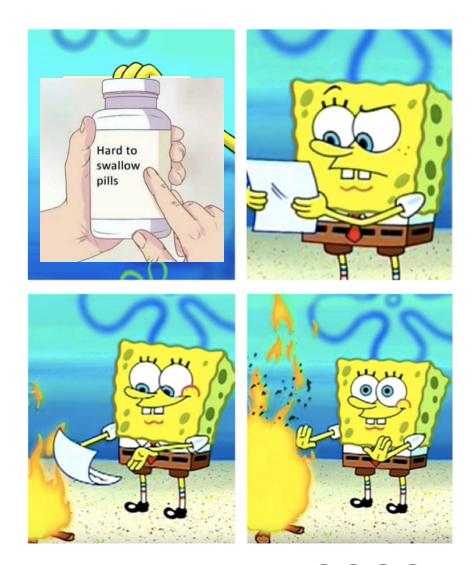
- 1. Gradual recovery after 4 plasma exchange
- 2. Possible complications
- Infection at central venous catheter
 - Alternative peripheral catheter
- Increase autoantibody synthesis
 - Immunosuppressive drug before exchange

Current Usage of Plasma Exchange

- 1. Not as first line treatment for SLE
- 2. Only one randomised trail
 - Not effect on renal outcome
- 3. Mainly case studies
 - Claimed it is effective
- 4. More research and studies are required

References

- Ho YC, Ahuja KD, Körner H, Adams MJ. β2GP1, anti-β2GP1 antibodies and platelets: key players in the antiphospholipid syndrome. Antibodies 2016;5:12-28.
- Hans R, Sharma RR, Marwaha N. Dramatic response to plasma exchange in systemic lupus erythematosus with acute complications: Report of two cases.
 Indian journal of critical care medicine: peer-reviewed, Indian Society of Critical Care Medicine 2013;17:385.
- Lewis EJ, Hunsicker LG, Lan S-P, Rohde RD, Lachin JM, Group* LNCS. A controlled trial of plasmapheresis therapy in severe lupus nephritis. N Engl J Med 1992;326:1373-1379.
- Soyuöz A, Karadağ Ö, Karaağaç T, Kılıç L, Bilgen ŞA, Özcebe Oİ. Therapeutic plasma exchange for refractory SLE: A comparison of outcomes between different sub-phenotypes. European journal of rheumatology 2018;5:32.
- Winters JL. Plasma exchange: concepts, mechanisms, and an overview of the American Society for Apheresis guidelines. ASH Education Program Book 2012;2012:7-12.



Questions????