Labs to Order (and why) 3 of 3

- Specific Antibodies to vaccines

- If quantitative immunoglobulin levels are normal or borderline low, there may still be immune function defects in antigen presentation or memory cell development. Testing antibodies to protein antigen (i.e. tetanus or diphtheria) and polysaccharide (i.e. pneumococcal antigens) is important to assay immune function.

- Complement - CH50

- This is a screening assay to test the function of the classical complement pathway. This assay is very heat labile, so a slightly low level may suggest poor handling. The alternative pathway of complement can be measured with AH50. If an abnormal result is found, further studies can be ordered for individual components.

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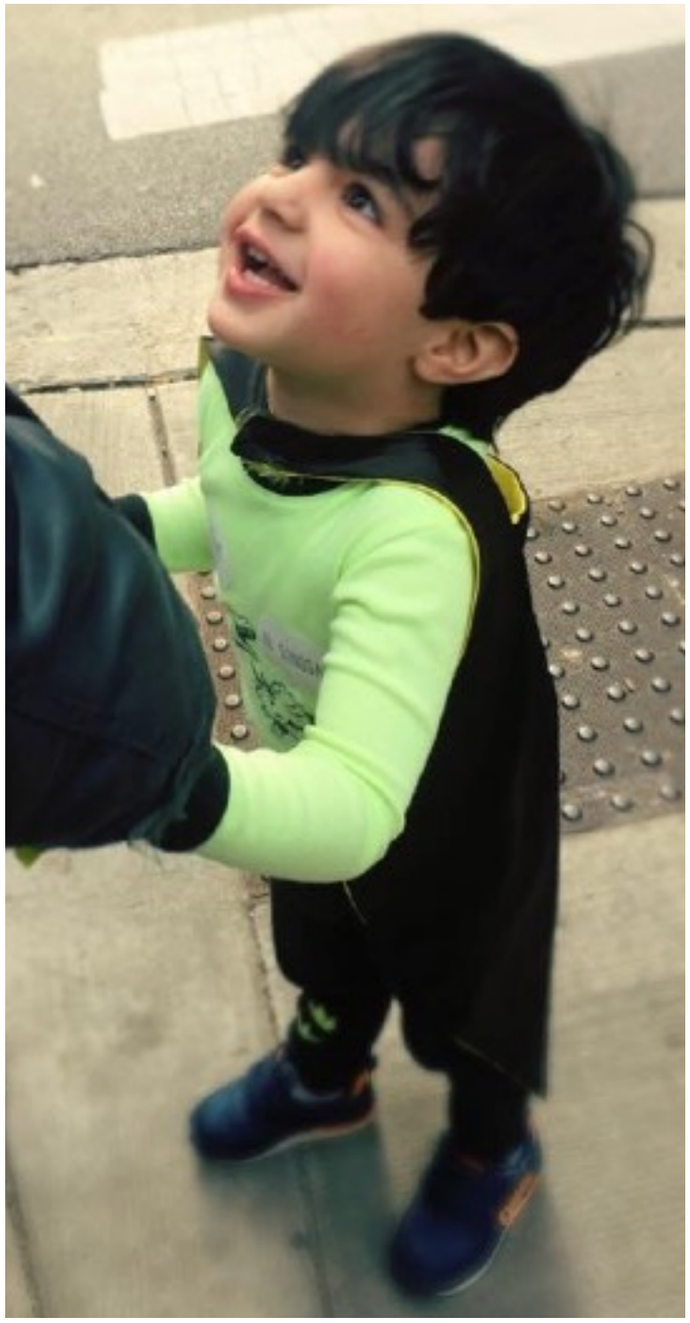
Why is PJ sick?

- An infection recurring in a single site is generally not indicative of a primary immunodeficiency disease, but rather it suggests an anatomic abnormality. On the other hand, several types of infections affecting various organ systems suggest PJ has an underlying immunologic deficiency.

- PJ has had difficulty fighting infections in his lower respiratory tract, central nervous system, and blood. He does not have a history of gastrointestinal or cutaneous infections. He has not had infections with unusual intracellular pathogens to suggest a T cell mediated or NK cell abnormality. His exam has some evidence of lymphocyte abnormalities.

- You suspect something is wrong with the PJ's B cells, with a probable defect in antibody production and/or function.

- Let's review some types of immunodeficiencies in this 5 minute video (Video 4 of 5), then proceed with the results



PJ, between infections, dressed up for Halloween