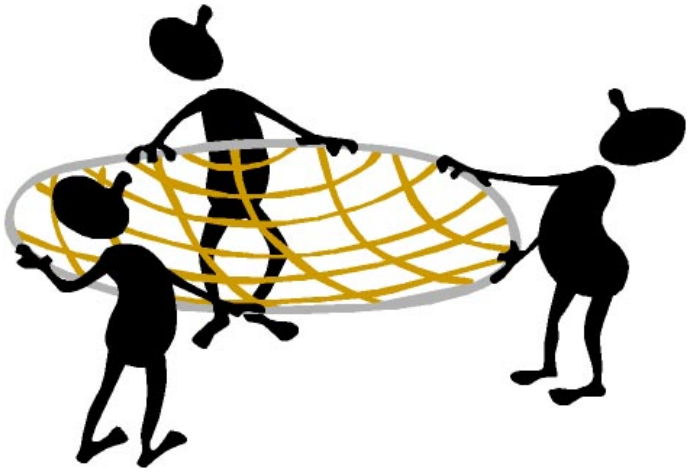
Monitoring IBD Therapy

IBD Patient Education Day

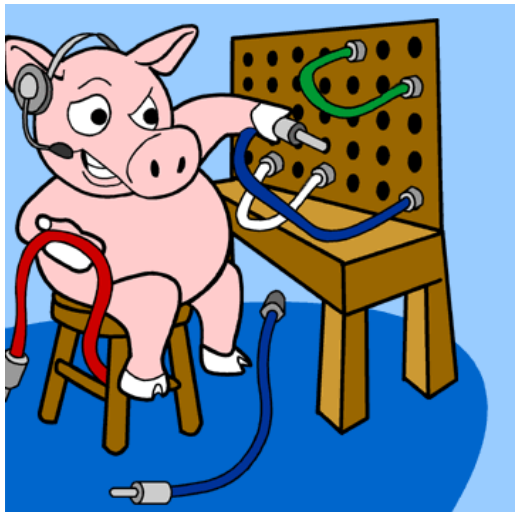
September 11, 2010

Kim L. Isaacs, MD

Why do we monitor drug therapy in IBD?



To Keep You Safe



To make sure it has a good chance of working

Steroids

John F. Kennedy

History

- Age 13 abdominal pain
- Age 16 diagnosis of colitis at Mayo Clinic
- Treated with steroids
- Age 22 → back pain
- Age 26 1st back operation
- Age 23 → addison's (adrenal gland supression from steroids)
- Compression fractures, osteoporosis (bone thining)

Spinal Compression Fracture

What do we know about steroid side effects?

Bone loss

Cataracts

Acne

Mood disturbances

What can we monitor?

Blood test – can be replaced if low

Bone Density

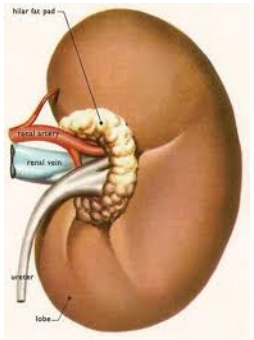
With steroid exposure – monitor bone density every 1-2 years with DEXA scan

What can we monitor?

5-Aminosalicylates

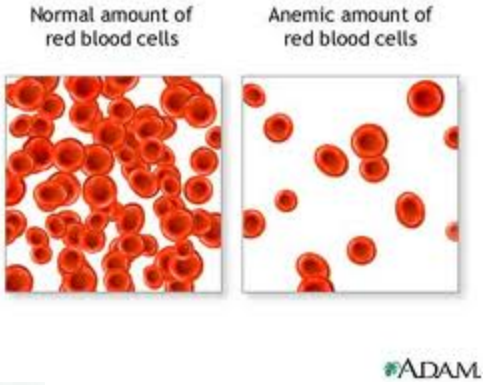
What are these?

- Sulfasalazine
- Asacol
- Pentasa
- Colazal®
- Rowasa
- Canasa
- Lialda
- Apriso™

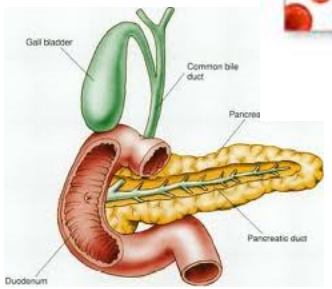


Abnormal kidney function

Side Effects

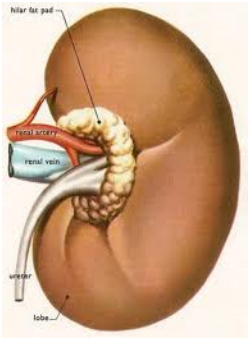


Anemia



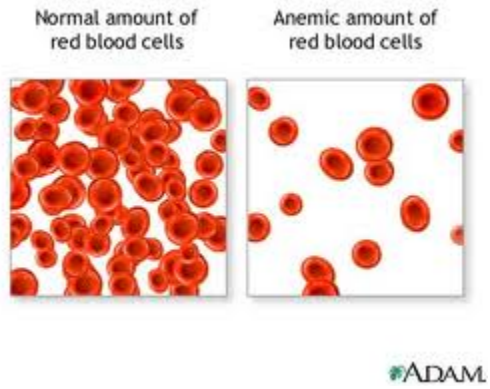
Pancreatitis

What can we monitor?



Creatinine – blood test – should be done annually

Loose kidney function → dialysis



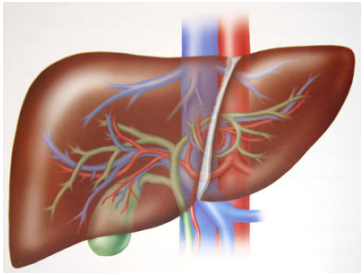
CBC – complete blood count

Anti-metabolites

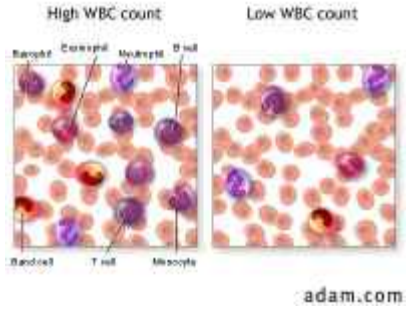
What are these?

- Azathioprine
- 6 MP
- Purenithol
- Imuran
- Aza-san

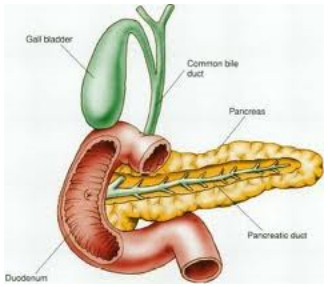
Possible Side effects



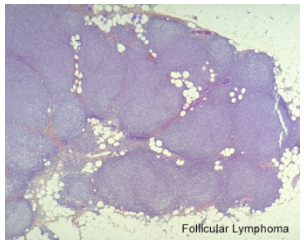
Liver inflammation



Low white blood cell count

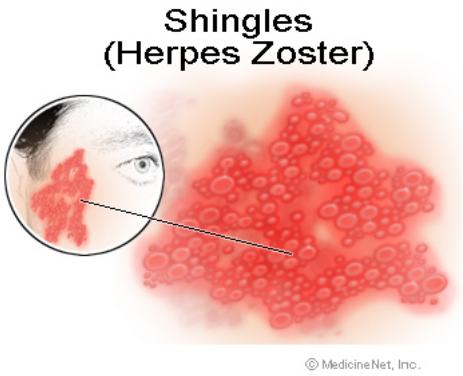


Pancreatitis → allergic reaction

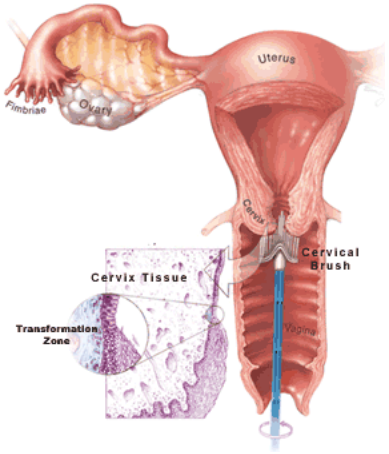


Rare: lymphoma

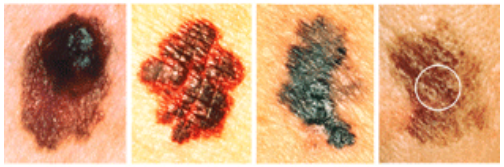
Other side effects



Reactivation of Viruses



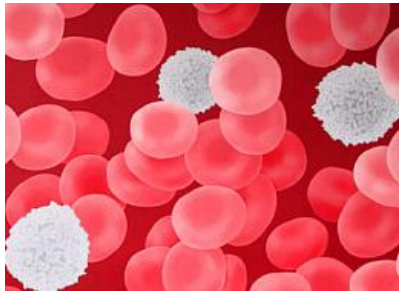
HPV virus and cervical cancer



Skin Cancer Prevention

Increased skin cancer risk

What can we monitor?



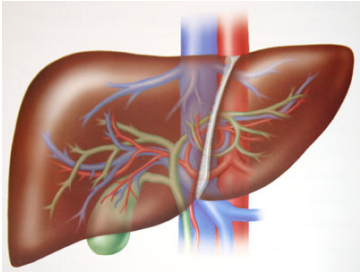
CBC – complete blood count which will give us the total white blood cell count as well as look for anemia.

If white count is low – drug dose is decreased or stopped.

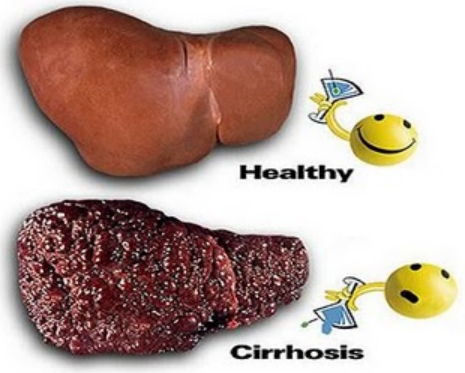
I am not exactly certain what it is yet until the tests come back but it looks like its some sort of fungal ifnection

If drug treatment is not adjusted a continued low white count can lead to infection.

What can we monitor?



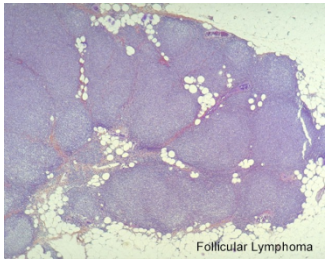
Blood Test to look at liver enzymes:
This may include AST, ALT, Bilirubin, Alkaline Phosphatase



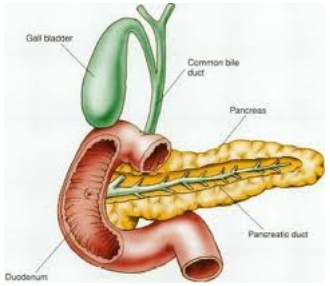
If enzymes are increased drug dose is either decreased or stopped.

If drug treatment is not adjusted a continued liver damage can lead to scarring of the liver.

What can we monitor?



Physical exam is monitored for development of abnormal lymph nodes.



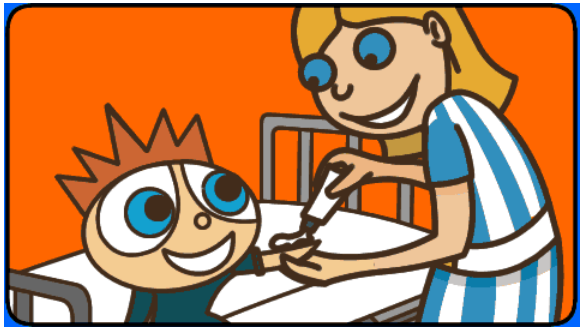
Amylase and lipase are not routinely monitored but are checked if pain and vomiting start after starting the medication.

Pancreatitis

What can we monitor?

Periodic skin checks especially in fair skinned people

Annual PAP Smears

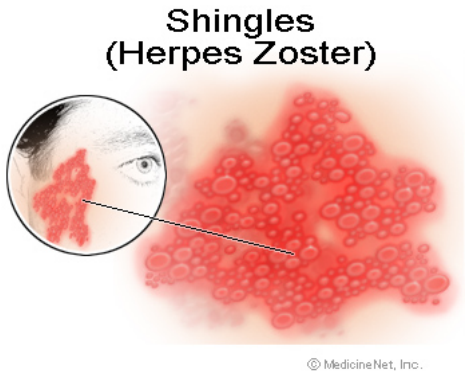


Can check immunity for a variety of viruses including hepatitis

Anti-TNF Drugs

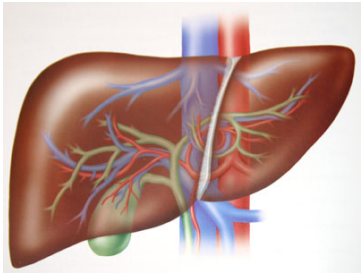
What are they?

- Remicade
- Humira
- Cimzia

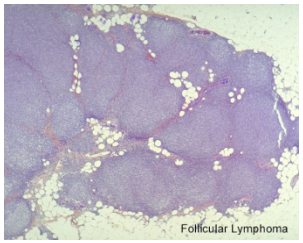


Reactivation of Viruses

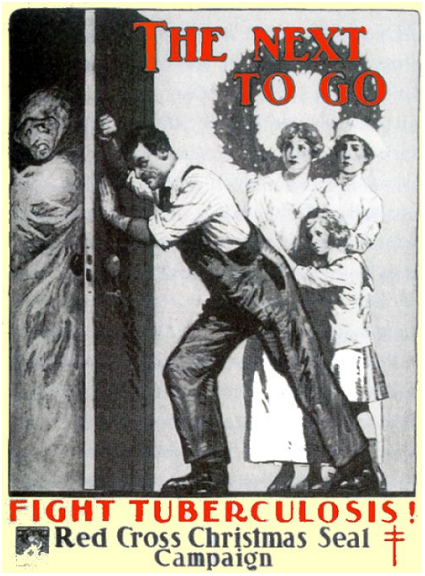
Possible side effects



Liver inflammation



Rare: lymphoma



Reactivate TB

What can be monitored?

TB skin test

Chest X-ray

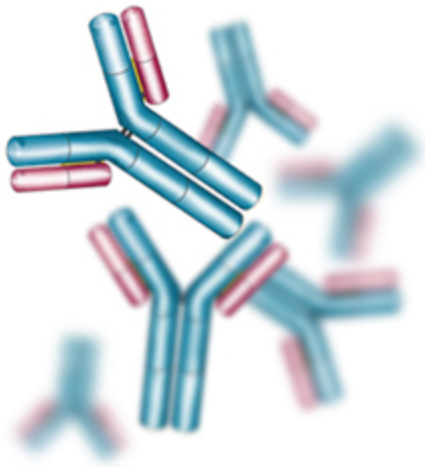
Can my medication work better?

6 MP/AZA

- Metabolites

Inflixmab

- Antibody levels
- Drug Levels



6MP Metabolites – Pro-predict

Abnormalities in this enzyme can lead to high levels of 6TG

AZA → 6-MP → 6-TIMP

6-MP → 6-TU (XO)

6-MP → 6-MMP (TPMT)

6-TIMP → 6-TG (HPRT)

6-TIMP → 6-MMP (TPMT)

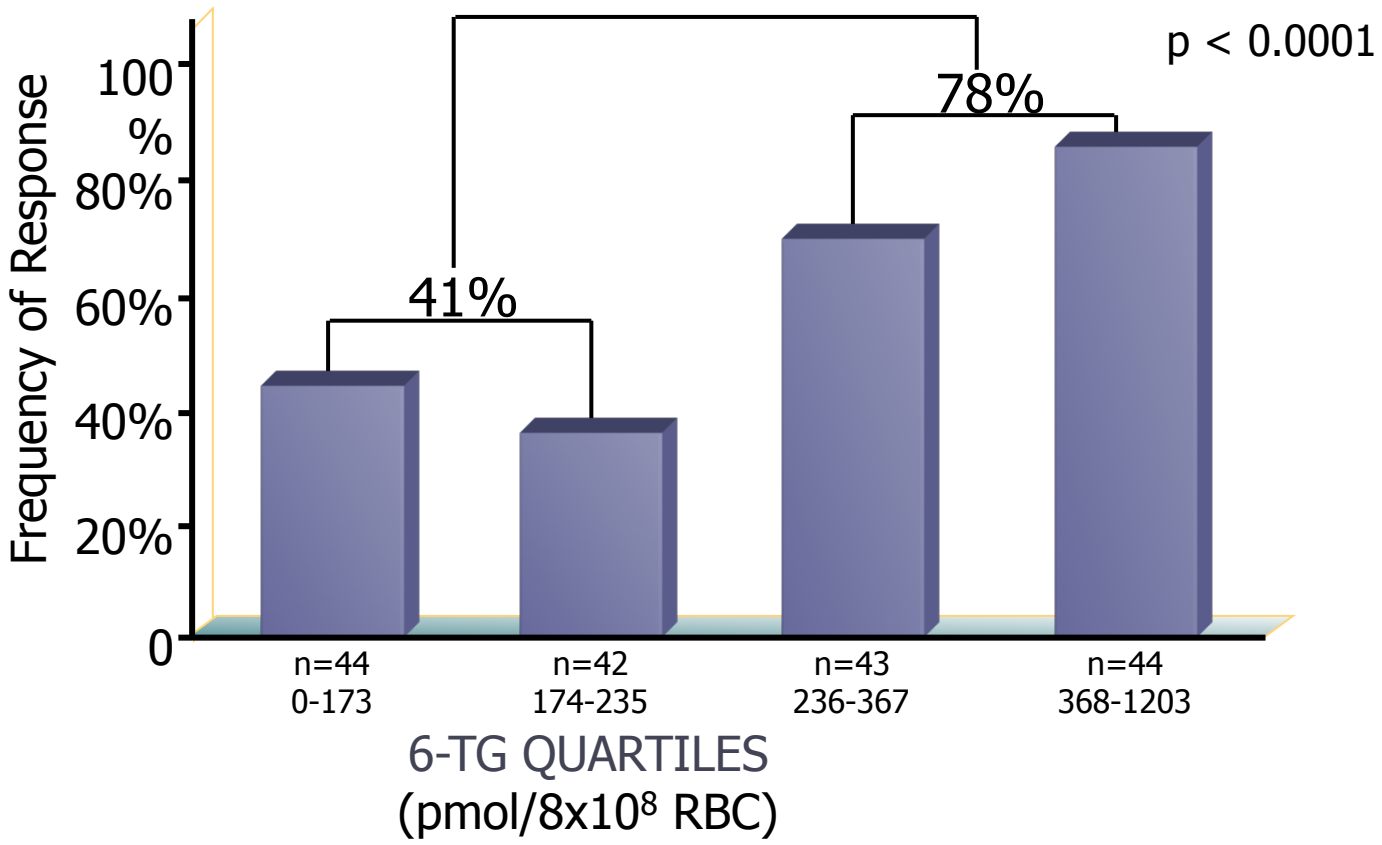
6-TG

Active metabolite – would like this greater than 235

6-MMP

Not active – very high levels may give liver problems

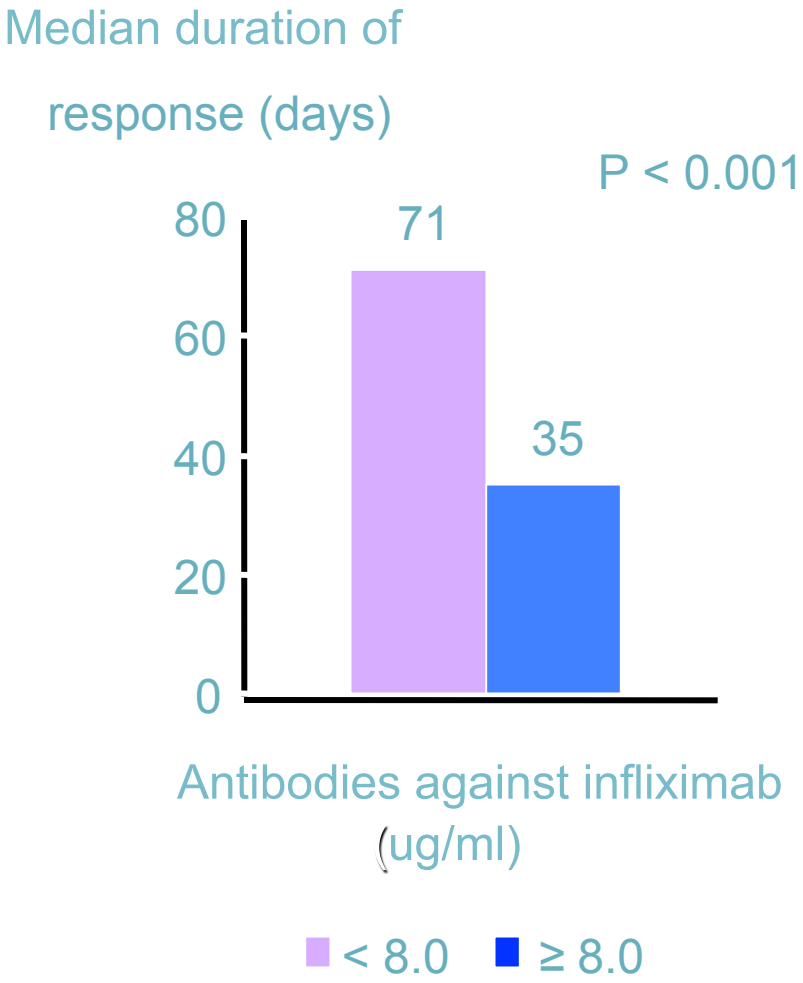
6-TG Level Correlates With Clinical Response



Dubinsky M. et al,
Gastroenterology 2000;118:705-13

Antibodies and how long Infliximab Works

- 125 consecutive patients with refractory CD
- Treatment with infliximab on demand, mean 3.9 infusions, range 1-17
- ATI in 61% of patients
- ATI concentrations $\geq$ 8 ug/L predicted greater risk of infusion reactions (RR 2.4)



Baert F et al. *N Engl J Med* 2003;348(7):601-607


SAFETY
FIRST

The End


off the mark
by Mark Parisi
www.offthemark.com
I JUST LOVE HAPPY ENDINGS
TITANIC
MarkParisi@aol.com
www.offthemark.com