

# MDT case study

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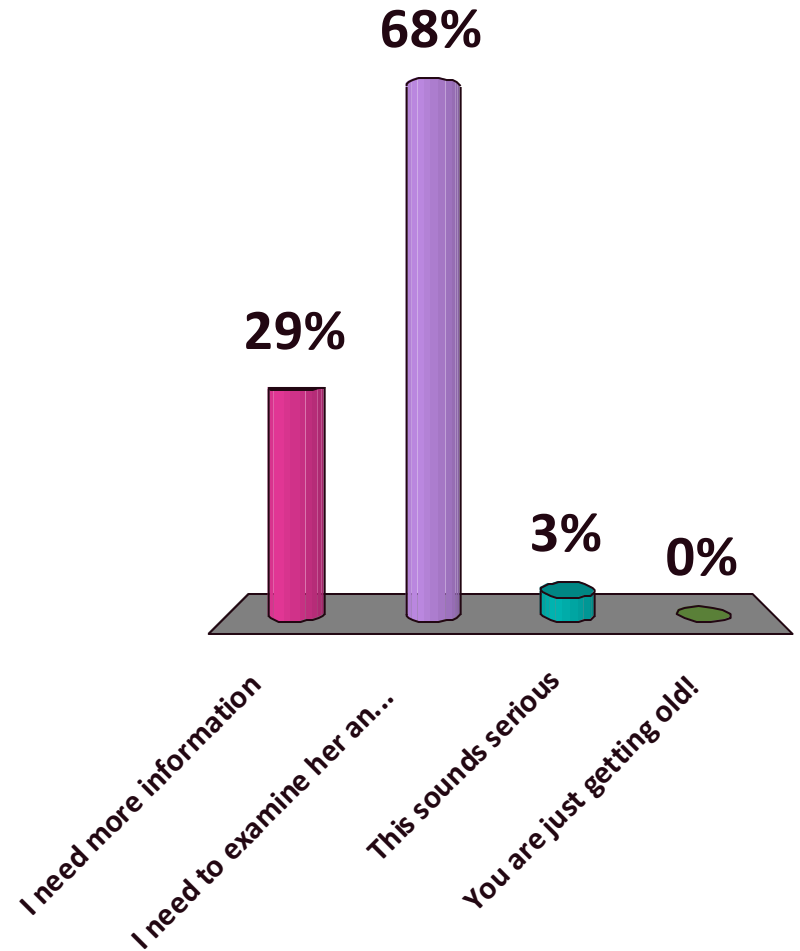
## Case history

- 56 year old lady from Bangladesh with 5 children
- Rarely seen her GP over the last 10 years
- Complains of increasing urinary frequency, nocturia and malaise
- Slight weight loss – 1Kg
- On statins and antihypertensives but otherwise well



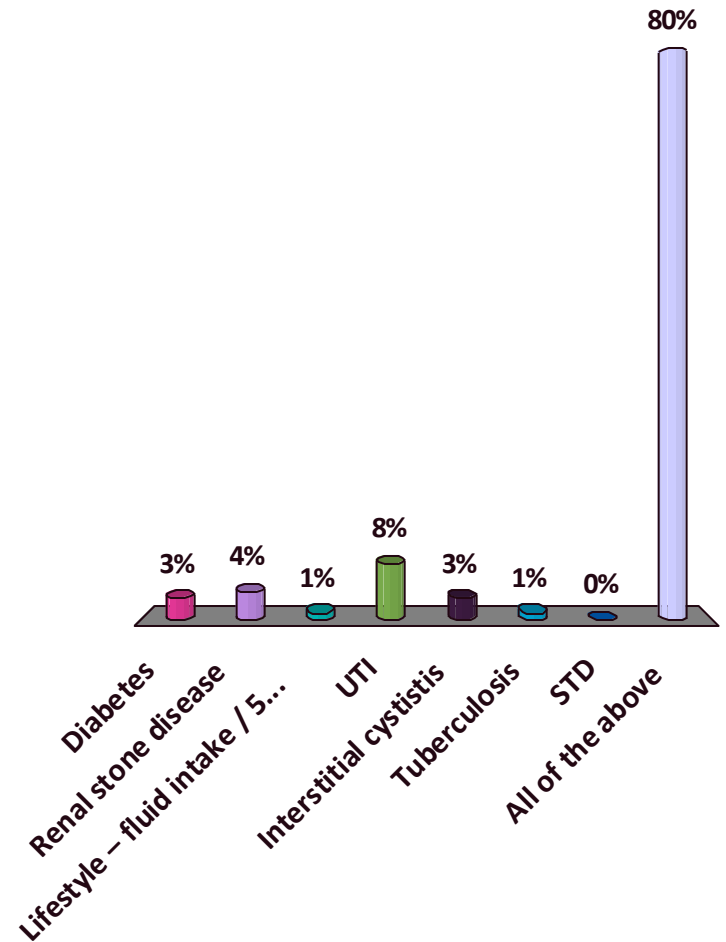
# Q1. What are you thinking?

1. I need more information
2. I need to examine her and do some tests
3. This sounds serious
4. You are just getting old!



## Q 2. What are the possible diagnoses for this patient?

1. Diabetes
2. Renal stone disease
3. Lifestyle – fluid intake / 5 children
4. UTI
5. Interstitial cystitis
6. Tuberculosis
7. STD
8. All of the above



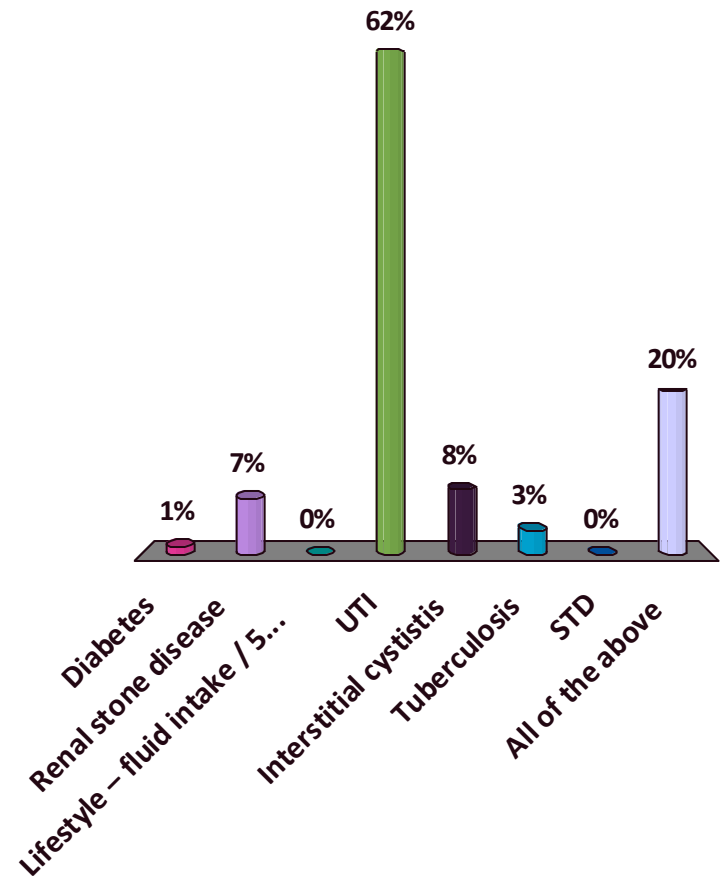
# The following history and investigations were obtained

- No history of recent travel
- No history of exposure to TB
- There may be some associated night sweats but she is a poor historian
- Abdominal examination is unremarkable
- Urine dip test negative for glucose
- Urine positive for nitrites, protein and haem



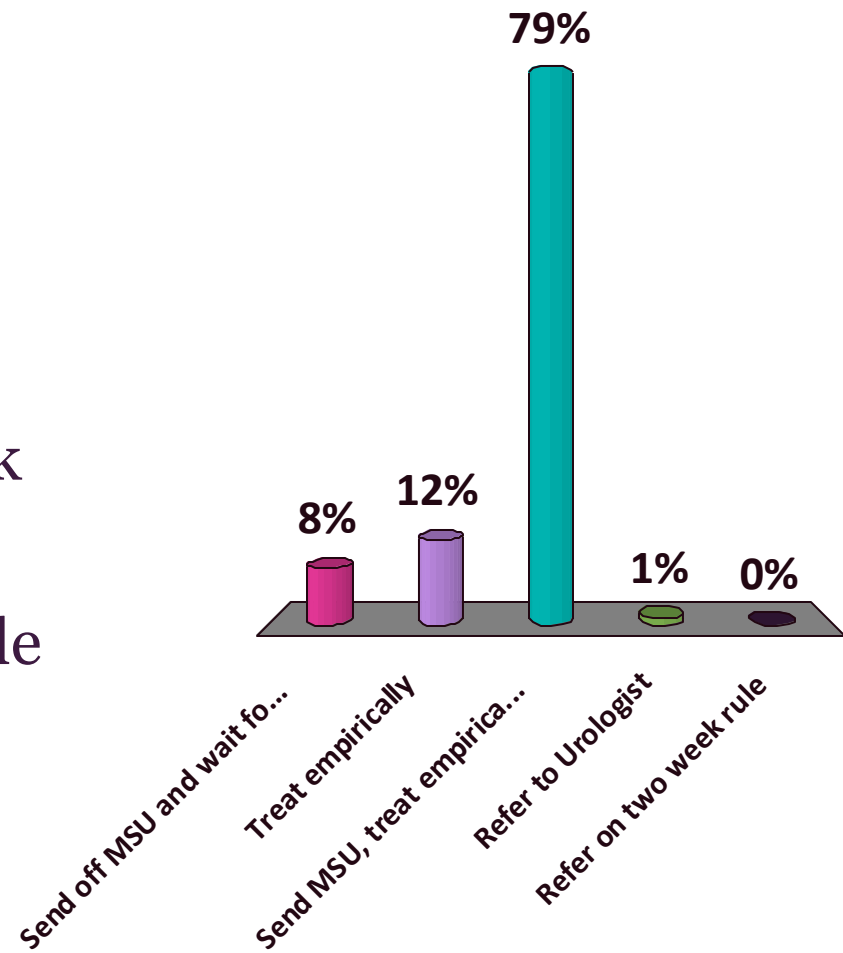
## Q3. What is the possible diagnosis for this patient now?

1. Diabetes
2. Renal stone disease
3. Lifestyle – fluid intake / 5 children
4. UTI
5. Interstitial cystitis
6. Tuberculosis
7. STD
8. All of the above



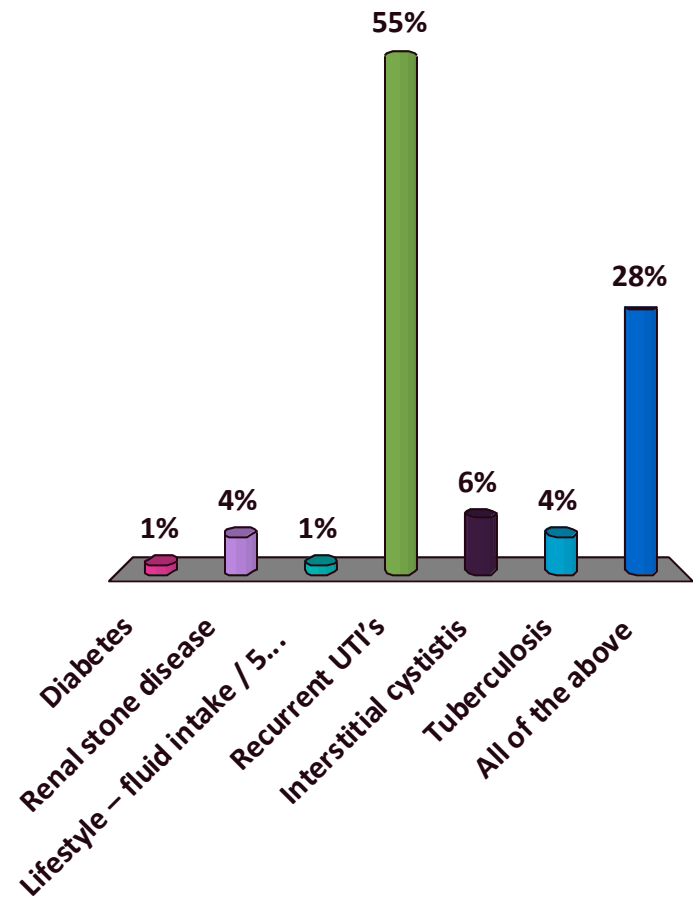
## Q 4. What would you do next?

1. Send off MSU and wait for the results
2. Treat empirically
3. Send MSU, treat empirically and re-assess after MSU back
4. Refer to Urologist
5. Refer on two week rule



# Q 5. 5 weeks later she returns with the same symptoms. What is the likely diagnosis?

1. Diabetes
2. Renal stone disease
3. Lifestyle – fluid intake / 5 children
4. Recurrent UTI's
5. Interstitial cystitis
6. Tuberculosis
7. All of the above





# What actually happened

- GP performed sent off MSU on this occasion and treated with appropriate antibiotic
- Symptoms recurred after 3 months
- Symptoms recurred again after 4 months
- Referred to Urologist



## Discussion point - What is a recurrent UTI?

- Episode of UTI after a documented UTI with successful resolution of an earlier episode + occurring 2x in last 6 months or 3x in last 12 months. Subclassified into:
  - **Persistent** infection – UTI caused by the same organisms.
    - Poss focus of infection e.g. stone/TCC/diverticulum/fistula
  - **Reinfection** – UTI caused by different organisms. Usually indicates susceptibility to UTI
    - Post menopause/sexual intercourse/poor hygiene/genetic
- 95% recurrent UTI's in a female are due to re-infection



# In the urology clinic

- History – rec UTI?/pyelonephritis/STD/complicated infection
- MSU results checked – is there a non-infective process e.g. stones, interstitial cystitis, cis (carcinoma in situ)
- PMH – including constipation, childhood UTI, neurological illness, diabetes
- Pregnant?
- On OCP
- **Family history** – UTI's associated with ABO blood group antigen non-secretors, Lewis non-secretor or P blood group secretors
- **Examination** – Including vaginal to ascertain oestrogenisation, genital prolapse, urethral diverticulum



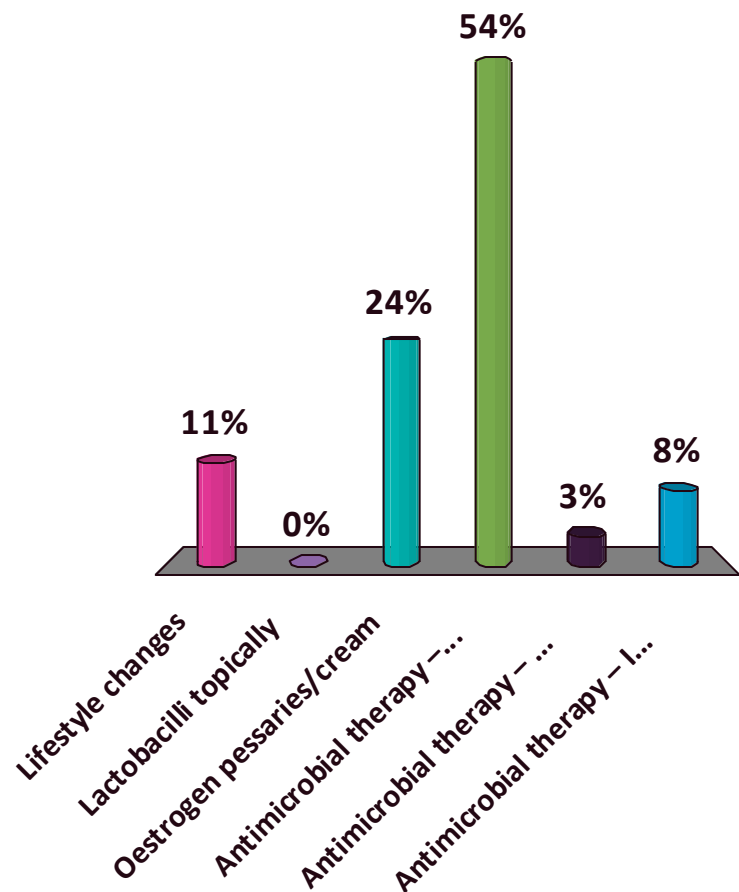
# Investigations

- MSU
- Cytology
- If sterile pyuria – AFB
- CT urogram or KUB/USS residual
- Possibly flexible cystoscopy



## Q 6. She has been found to have recurrent UTI's. What are your favoured treatment strategies?

1. Lifestyle changes
2. Lactobacilli topically
3. Oestrogen pessaries/cream
4. Antimicrobial therapy – Low dose long-term
5. Antimicrobial therapy – Post coitus
6. Antimicrobial therapy – Intermittent self-start



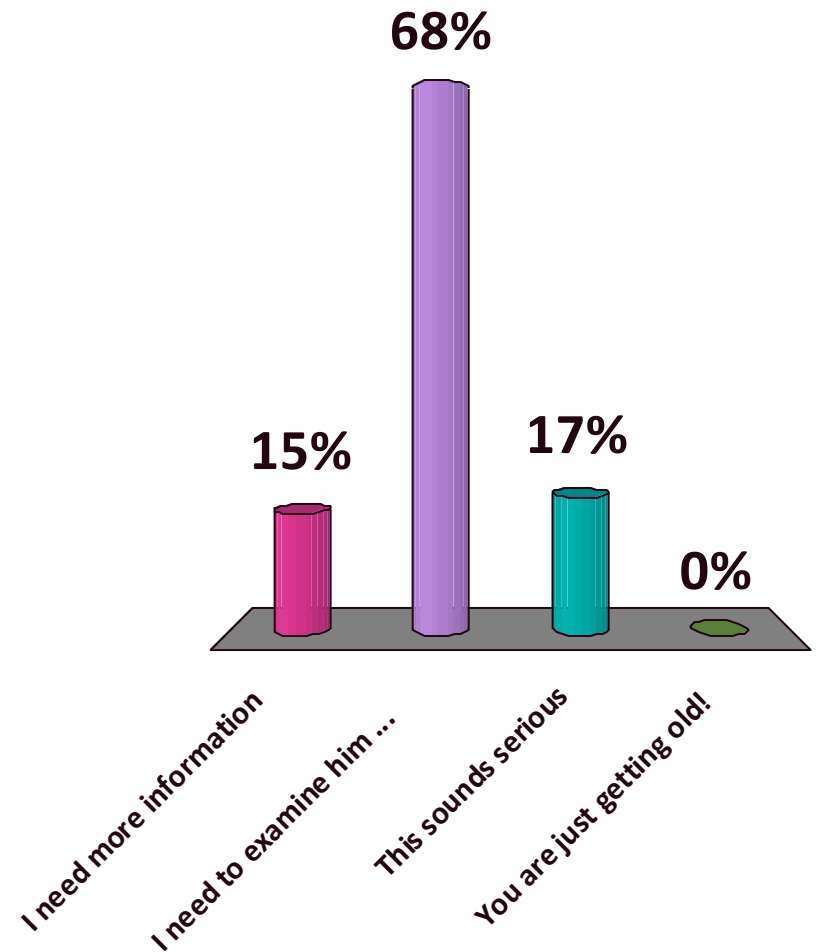
## Case history

- 65 year old man from Bangladesh – wife known to you
- Rarely seen his GP over the last 10 years
- Epigastric discomfort, pain occasionally intense but vague
- Slight weight loss – 2.5 Kg over 2 months
- On statins and antihypertensives but otherwise well



# What are you thinking?

1. I need more information
2. I need to examine him and do some tests
3. This sounds serious
4. You are just getting old!



# Examination and investigation

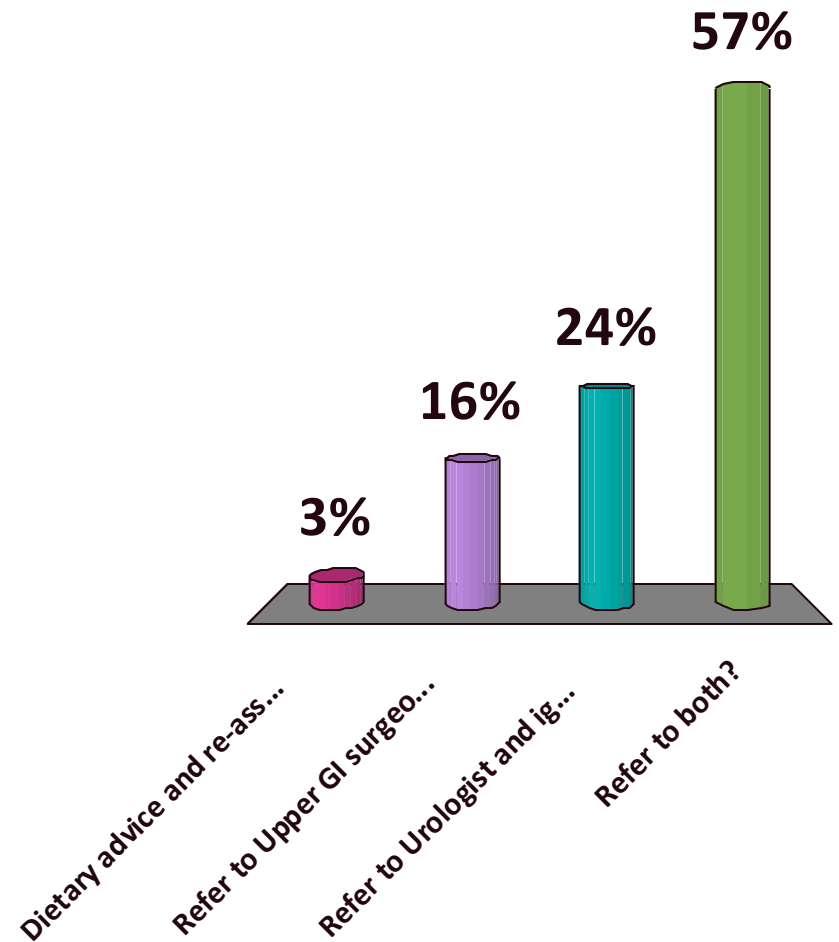
- Examination reveals slight tenderness in right upper quadrant
- You arrange an USS
- This reveals gall stones but also a large right renal cyst
- What next?





## Q 2. What next?

1. Dietary advice and re-assure?
2. Refer to Upper GI surgeon and ignore cyst?
3. Refer to Urologist and ignore gall stones?
4. Refer to both?



# Differential diagnosis of the cystic renal lesions

- Simple renal cysts
- Cystic renal-cell carcinoma
- Autosomal dominant polycystic kidney disease
- Multicystic dysplastic kidney disease
- Multilocular cyst
- VHL syndrome



## In Urological clinic

- History etc
- Confirmation of normal renal function
- CT urogram – pre and post contrast
- Bosniak cyst classification – I-IV
  - I – benign and smooth with no enhancement/septae
  - II – thin septae + minimal Ca. No enhancement
  - III – Irregular/mod Ca/thick septae/enhancement
  - IV – Solid enhancing elements



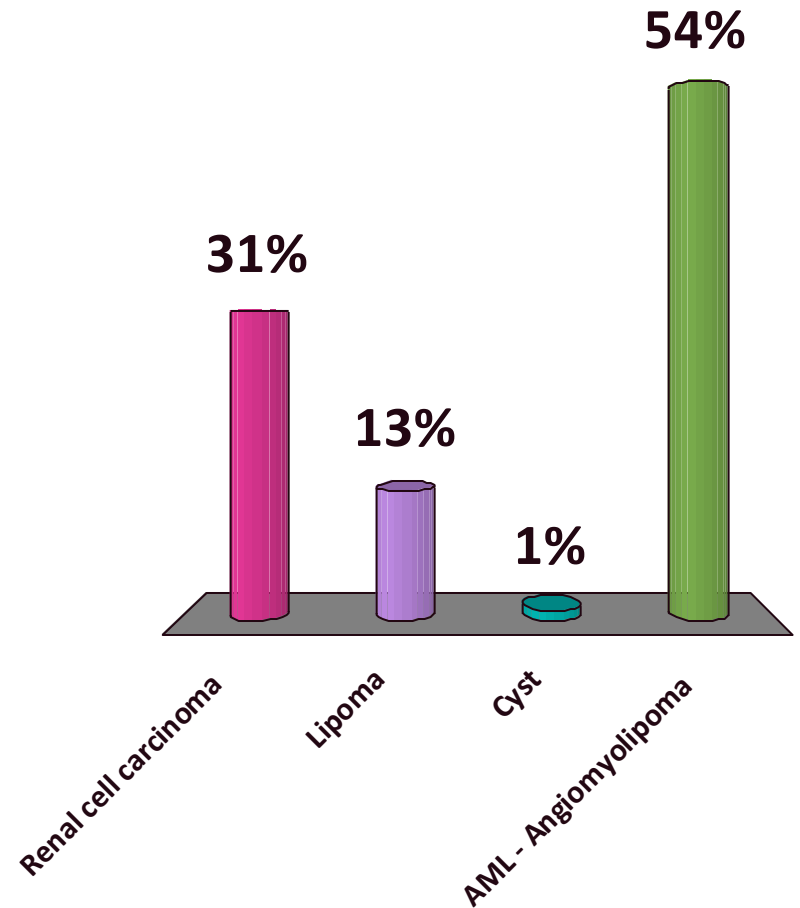
# Bosniak and clinical management

- Type I – benign and require no follow-up
- Type II – 10 to 20% risk malignant transformation (IIF)
- Type III – 40-50% chance malignancy therefore operate
- Type IV - > 90% malignant therefore operate



# Q 3. Above patient presented with haematuria and CT revealed a fatty lesion in the kidney. Diagnosis?

1. Renal cell carcinoma
2. Lipoma
3. Cyst
4. AML -  
Angiomyolipoma



# Angiomyolipoma - AML

- 80% sporadic. Female : Male ratio is 4:1 (rest tuberous sclerosis)
- Middle aged
- 80% right sided
- 5 % growth rate per year
- 4cm diameter or recurrent bleeding is indication for intervention (selective embolisation or partial neph)
- **Tuberous sclerosis – bilateral, smaller and younger – 20% growth per year**

