



# The challenges of providing advanced spine care to underserved communities in Southern Africa

Monday 7 May 2018 09H10-09H30



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# Disclosure information



World Spine Care

I have no disclosures



# Namibian Statistics



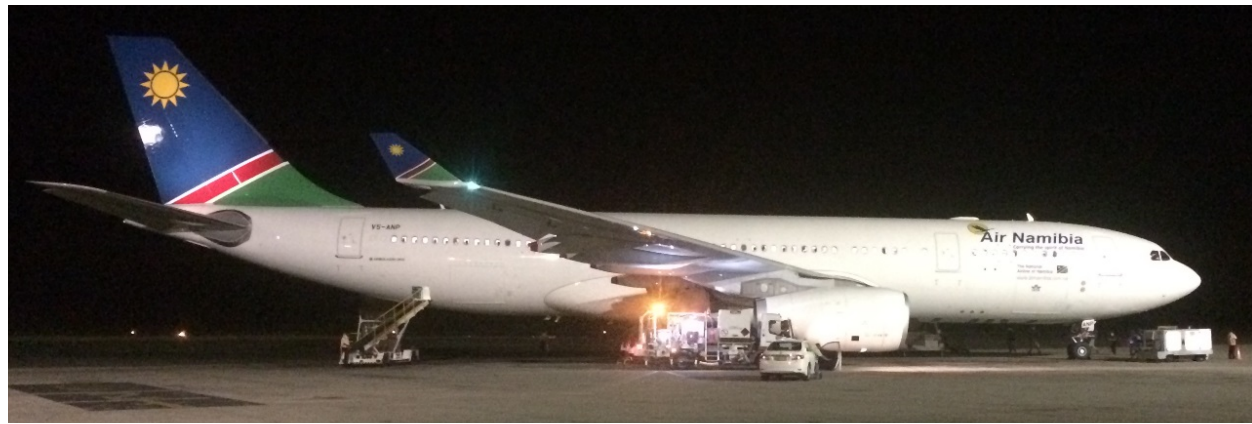
Capital: Windhoek

Population: 2.5 mil

Area: 825 000 square km

2.54 Namibians per square km

Motor Vehicle Accident (MVA) rate is 45 deaths per 100 000 population



# Dessert



# Introduction

- Fellowship trained spinal surgeon (RSA)
- Share my experiences in Namibia to try and sketch the challenges of 3<sup>rd</sup> world spine care
- How do we define advanced spine care?
  - Does this mean complex procedures? Computer assisted navigation surgery? Micro surgery?
- Without sounding arrogant..... Surgical Spine care is advanced – there is no “light option” available.
  - E.g. if a relatively “simple” spinal biopsy goes wrong....this can result in sepsis, paralysis or major blood loss.

# Introduction.....

- We just went through the birth pains in Namibia setting up a spinal service..... after 5 years the toddler is learning to walk.....
- At a minimum one needs:
  - Screening programs (manage the referrals as 95% don't need surgery)
  - Access to a MRI scanner – this is central to making the diagnosis & without it, care can be very difficult
  - Dedicated Spine surgeon (neuro / orthopaedic surgeon)
  - C-arm in theatre
  - Operating table with good light
  - Microscope
  - Implants
  - Senior Anaesthesia doctors & High Care beds post-operatively
  - Rehabilitation facility

# Healthcare



- In the Private sector – the best, but serves the minority
- The State / Public / Government sector – the worst, but serves the masses
- “Islands of excellence in a sea of need”



# Spinal Out-patients Dept

- 35-50 new patients every Wednesday (2-3 new TB Spines every week)
- Pathology ranges from Trauma, TB, Tumours to degenerative back & neck disease
- Impossible to adequately screen 35-50 patients and not miss a serious condition in one morning clinic
- Waiting list to see a spine surgeon in Namibia:
  - In private = 3-4 months.
  - In state = 24 hours .....patient see the previous day with 2/7 back pain, gets seen next morning!
- No concept of physio, chiro, 6/52 conservative Mx



In the State Hospitals we often work under shocking conditions.....



In Private Hospital you can do any procedures.....



# What are the causes of Spinal Cord Injuries in Namibia?

- Motor vehicle accidents
- Driving into animals on the road
- Pedestrian vehicle accidents
- Inter-personal violence
- Tourists & Roll overs
- Extreme sports (Quad bike etc.)
- “Regular Sports” like Rugby
- Large industries like mining results in many “Industrial Accidents”

Month	Crashes	Fatalities	Injuries
Jan	240	42	438
Feb	251	31	496
Mar	297	35	495
April	238	44	424
May	247	31	419
June	283	43	502
July	343	37	531
Aug	257	54	409
Sep	304	61	450
Oct	255	40	513
Nov	299	51	453
Dec	276	72	591
<b>Total</b>	<b>3484</b>	<b>632</b>	<b>5845</b>

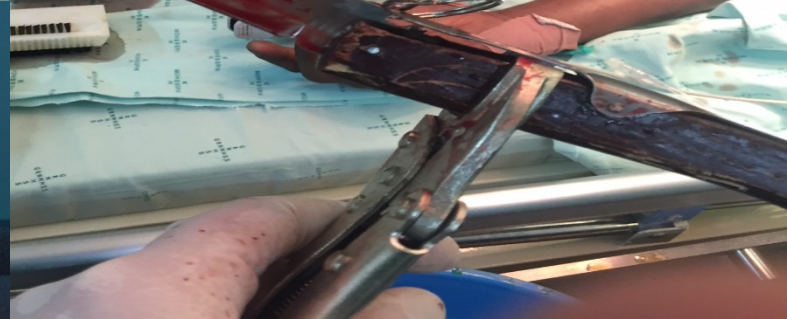
# High Energy Accidents.....



# Animals on the road.....



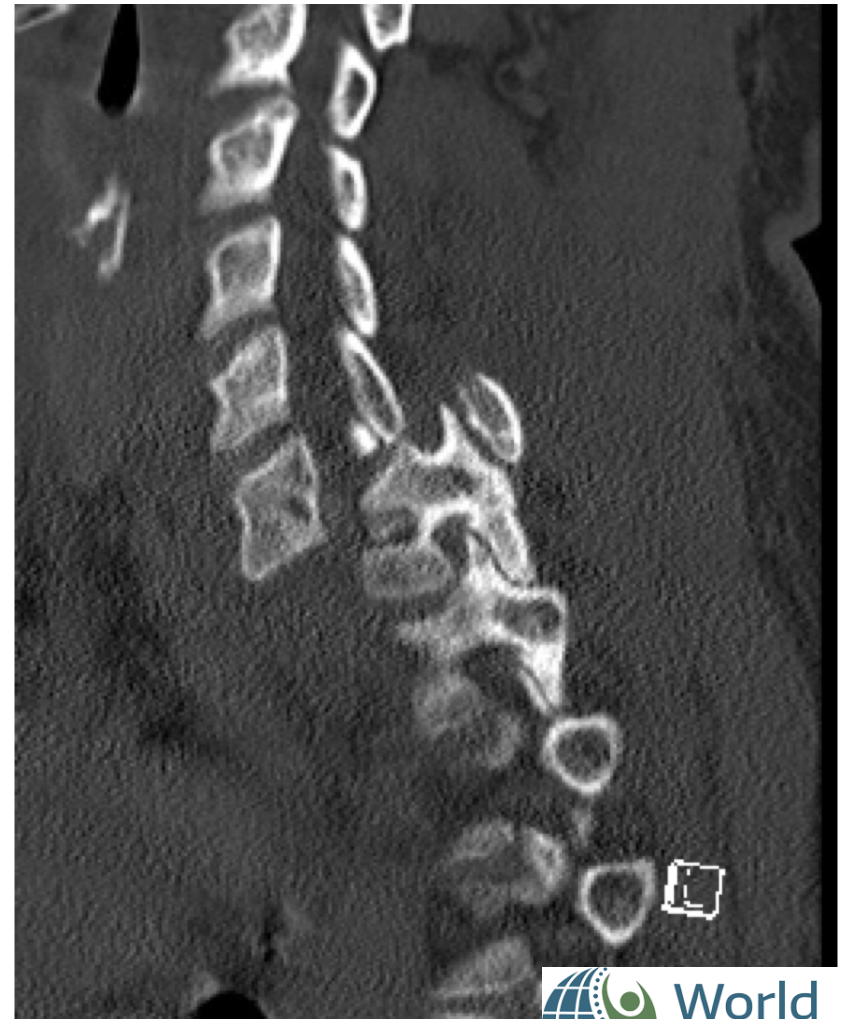
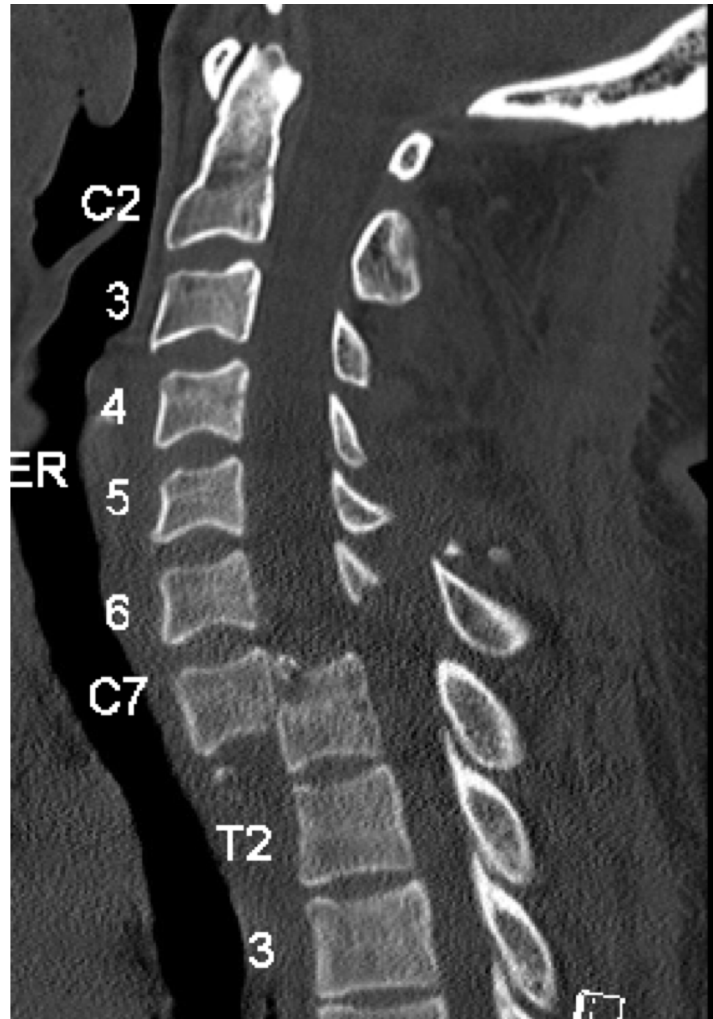
Sunday morning a couple of weeks ago....



# Tourist Roll-over.....



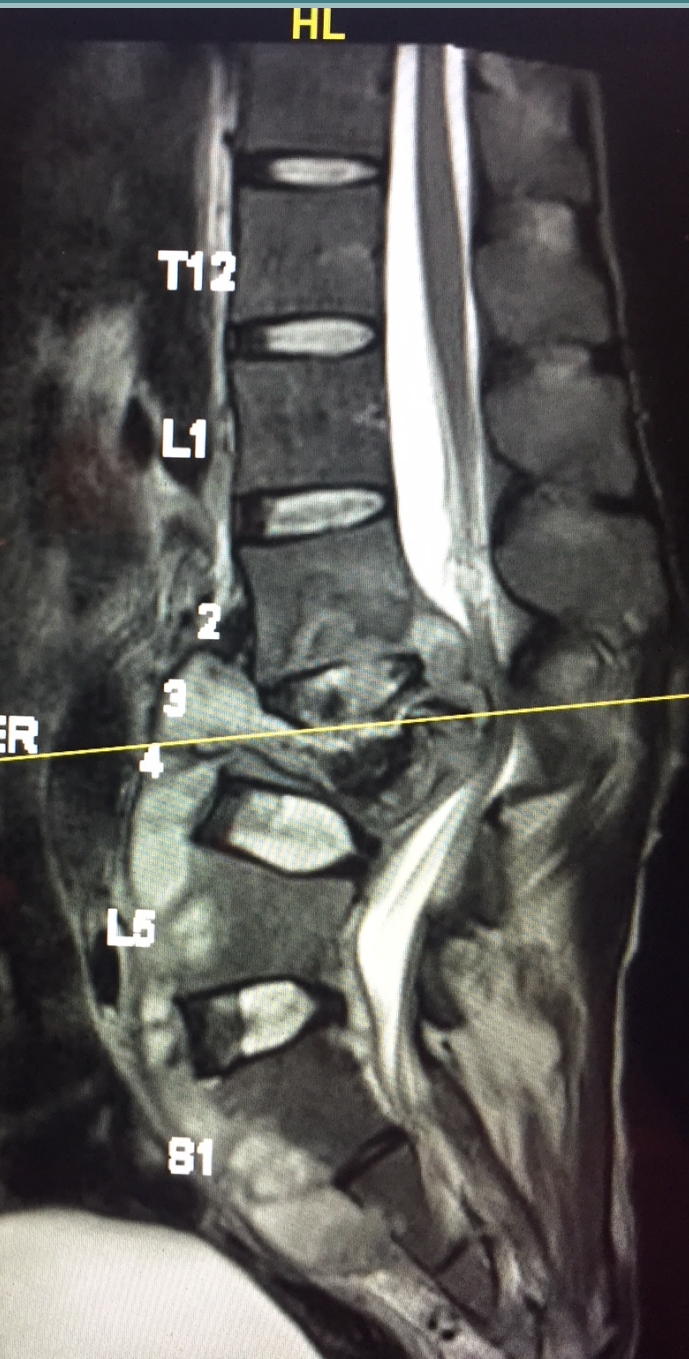
# 52 year old female - high speed MVA: - delay to treatment 2/52



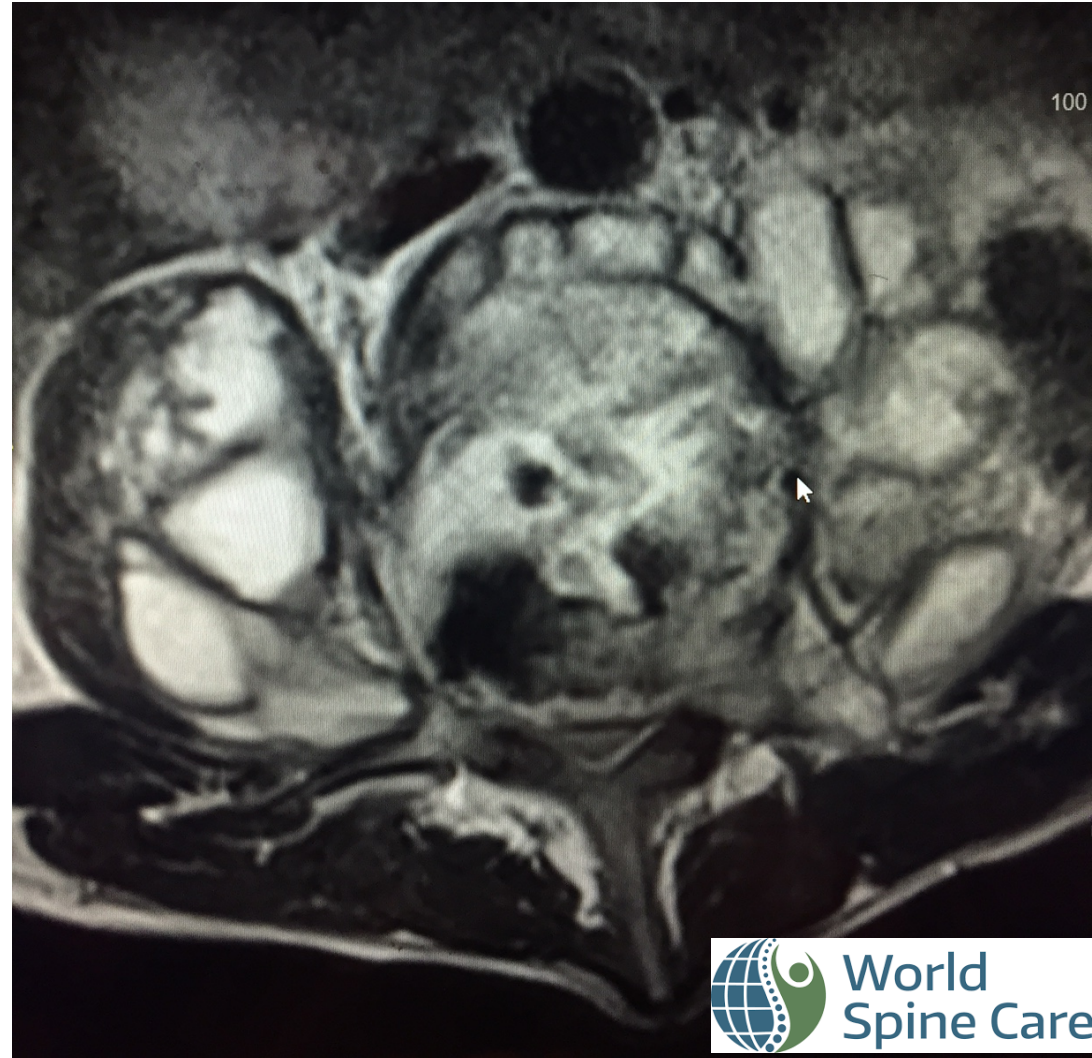


# Our Challenges with regards to Trauma

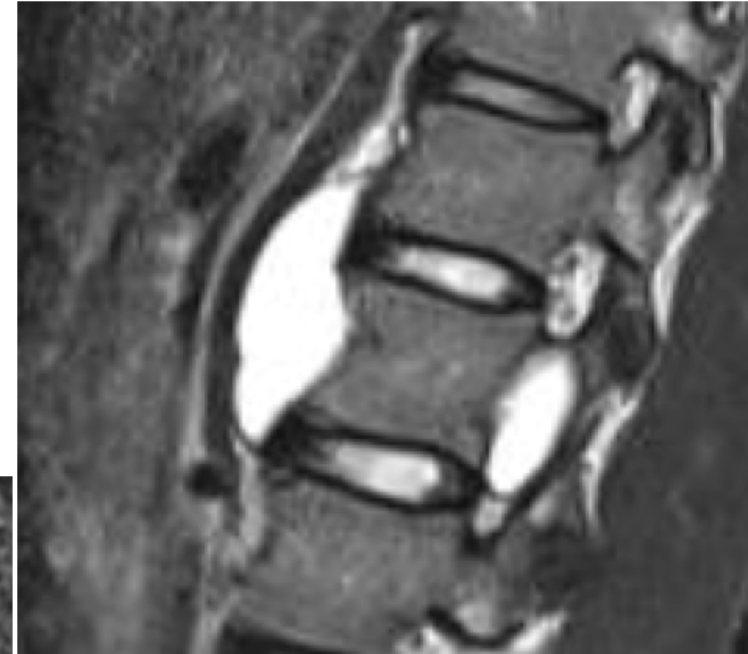
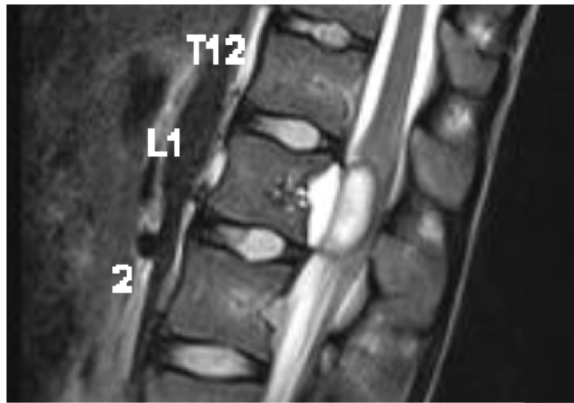
- Vast distances
- Accidents happen in Rural areas
- No national emergency number to call
- Patients wait for hours at scene of accident before being “found”.
- Initial care is poor (no concept of ATLS etc.)
- Closest hospital cannot deal with major injuries
- 5-10 hour ambulance transfer to big centre

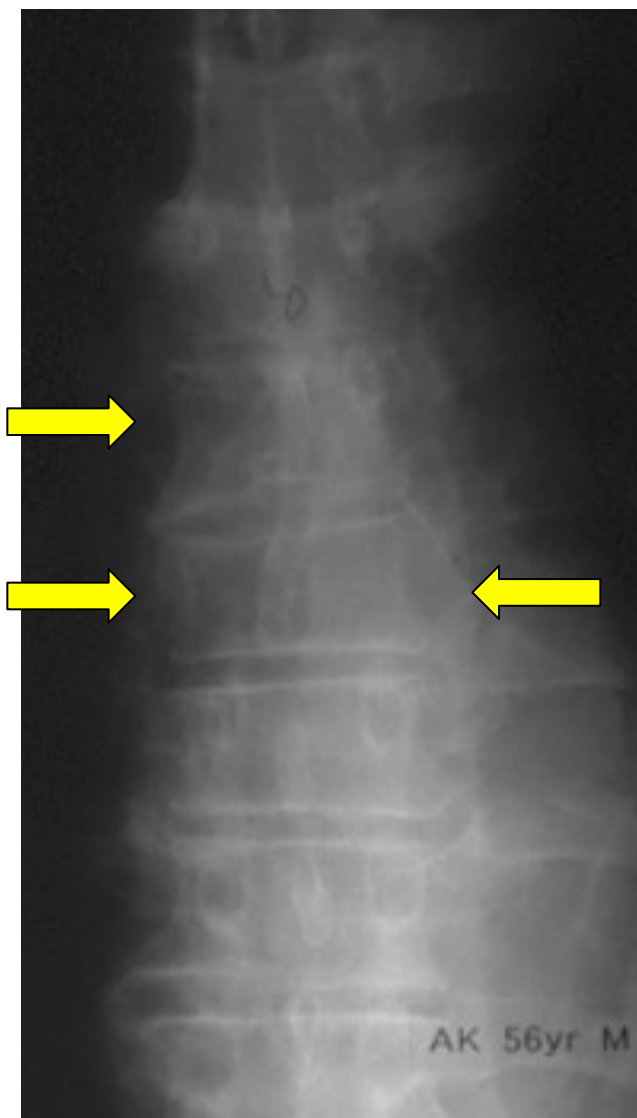


# TB of the Spine



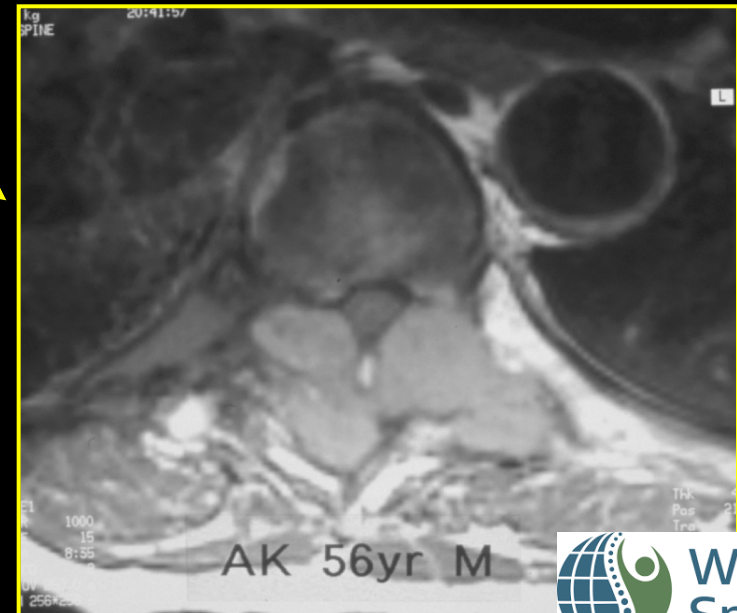
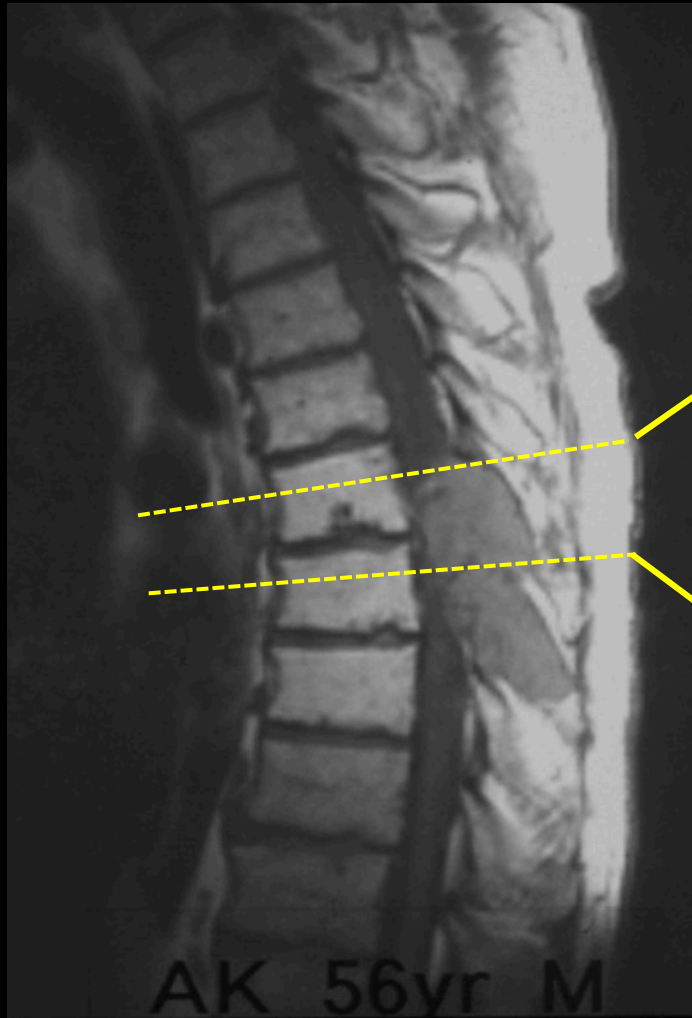
18 year old male:  
- delay to treatment 8/12





Tumours.....

Note the missing pedicles



# World Class Animals



# Our Challenges with non-trauma causes..... TB, Tumour, Degeneration

- No prevention / screening programs exist
- (WSC we need you in Namibia.....)
- Ignorance is bliss.... E.g. 18 year old with catheter for 4 months or SCI with dislocation being kept for 2 weeks to see if they improve....
- Poor inter-hospital transport system – boils down to distance
- Rural vs Private (all vs nothing)
- Time to MRI (state vs private)
- Time to Theatre (state vs private)

# Despite all the constraints... some good news in Namibia

- In the last 5 years we have set up a comprehensive surgical spinal service in Windhoek with 3 monthly back up from Tygerberg Hospital in Cape Town.
- Spinal biopsy service - this is big step forward – at least we now know what we are treating (Resistant TB / Tumours / Infections).
- Our MVA Fund have the resources to move poly trauma / paralysed patients by road / air around the country and into the appropriate hospitals.



# Despite all the constraints... some Good news in Namibia

- Last 3 years big emphasis on Trauma / ATLS / Trauma Orthopaedic & Spine Care with regular courses & workshops
- Ability to treat acute spinal cord injuries with traction / cones reduction while waiting for surgery
- Spinalis rehab unit: Caring staff, nurses, physio and structured rehabilitation program
- What's app advice group (pt confidentiality etc problem)
- Once the patient has been worked up in the periphery and reaches us in Windhoek.... The care is generally good....
- The myth of Advanced Surgical Spine care in rural areas / peripheral hospitals maybe unrealistic



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**THANK YOU**