

# Threat letter menace: the Fiji experience

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# First Encounter

- On October 17 2001, a Foreign Embassy received a letter containing white powder, sent from overseas
- First investigated by their own security, later a specimen sent to CWM lab

# Locally

- Almost simultaneously, four letters of local origin were sent to public offices and prominent citizens
- Identical in lay out, hand written, and same point of origin
- Every thing, including the mail of that day was collected by forensic technicians, and sent to lab

# Lab response

- Emergency meeting was called by the consultant pathologist, including the medical superintendent, ICN, clinicians and support staff
- Disaster management team was formed, and guidelines were issued to clinicians for possible exposure cases

# Lab action plan

- Lab protocol was developed with specific objective of confirming the presence or absence of B. anthracis in the suspected material in line with CDC guidelines, using available resources
- Sending specimens was purposefully not considered an option

# Processing of Samples

- Class II biosafety hood was used for processing these specimen in isolated lab, with restricted entry
- None of the specimens showed any organisms by Gram stain on day one

- Sub cultured in Trypticase Soya Broth, Blood agar, and McConkey agar
- On second day plates showed no growth, re incubated
- Broth showed turbidity
- Gram smear showed Gram positive bacilli(GPB)

- Sub cultured on secondary plates, motility agar tube
- Primary plates showed no growth on day three, secondary plates grew white, dry large hemolytic colonies, Gram stain showed GPB in chains
- Motility tube showed ambiguous result



# Final results

- Microbact™ was inoculated, which ruled out *B. anthracis* for all five specimens

# Operations Difficulties

- Storage of hazardous material posed space problem, therefore forensic technicians were advised to collect specimen in broth, send to the lab and seal the area, pending lab report

# Further encounters

- Five more letters containing suspected material, all of local origin were sent to various offices and people in the next one month
- All were processed using the same protocol, and found to be negative for *B. anthracis*

# First major challenge

- One letter containing white powder was sent to prominent public office, sealed off after collection of specimen
- Standard protocol applied in processing
- Day one showed no organism, inoculated on standard plates and broth

# Secondary plates

- ✓ GPB, non hemolytic on BA
- ✓ Non-Motile by hanging drop
- ✓ Catalase +, Oxidase –
- ✓ Microbact results:
  - ✓ Xylose, ONPG, gelatin, & arabinose +  
ive

# Expert opinion

- Findings sent to WHO Suva office, which sent them to regional, & head office in Geneva
- Also Labs in Australia
- Advised for further investigations,
- API 20™ & API 50 CH™ put up, which was recommended by most

# Results

API 20 E: ONPG, glucose, & gelatin +

API 50 CH results:

5	5	4	3
L- arabinos	Maltose	Glycerol	Ribose
D-Glucose	Mellibiose	N-acet Glu	$\beta$ -Methyl xyloside
D-Fructose	Sacchrose	Cellobiose	Amygladaline
Mannitol	Trehalose	$\beta$ - Gentibiose	Arbutine
Esculin	Glycogen		Salicin



# Confirmation

- ✓ B. megaterium,
- ✓ Confirmed by WHO experts, & other consulted

# Conclusions

- Following the events of September 11 in USA and subsequent anthrax scare, similar tactics were used in Fiji for creating panic and confusion among the public

# Conclusions-contd

- Although possibility of anthrax spores sent to any one remained a remote possibility, it succeeded in creating a sense of apprehension, scare, and heightened state of alert

## Conclusions-contd

- It also resulted in enormous waste in terms of work hours for the offices where these were sent, law enforcement agencies in investigations, and extra burden in lab processing, resulting in resource drains on lab facility of limited resources.

# Conclusions-contd

- While Anthrax scare died down in rest of the world, last week of January University registrar's office received a suspected letter containing white powder
- B. Anthracis ruled out in 3 days

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