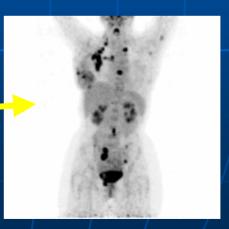
# POSITRON EMISION TOMOGRAPHY (PET SCANNING)

THE WORLD STANDARD OF CARE AND MANAGEMENT
OF
CANCER PATIENTS

#### WITH THE EXCEPTION OF ONTARIO





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# The TRAVESTY OF THE STATE OF PET IN ONTARIO

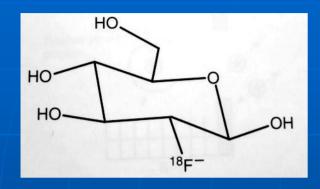
- PET SCANNING IS COVERED IN QUEBEC.
- •NOVA SCOTIA AND PEI SEND PATIENTS TO QUEBEC.
- •BC, ALBERTA AND MANITOBA POISED TO OFFER PET FOR THE BENEFITS OF THEIR CANCER PATIENTS.

#### CANCER IMAGING WITH 'FDG-PET' SCANNING

- ALL CELLS CAN USE SUGAR/GLUCOSE FOR ENERGY.
  - CANCER CELLS NEED A LOT MORE GLUCOSE.
- •WE INJECT TINY AMOUNT OF RADIOACTIVE GLUCOSE.

•CANCERS 'SHINE' OUT AGAINST THE 'BACKGROUND'.

FDG (fluoro-deoxyglucose)



Radioactive Glucose < billionth of a gram

Cancer of the esophagus

Kidneys

Cancer Spread (Metastasis)

Brain

### 2 PET Cases:

FDG-PET scans made major Changes in these cancer patients Management.

THE LIBERAL GOVERNMENT WON'T EVEN

**CONSIDER STUDYING BENEFITS OF PET** 

IN THESE CANCERS UNTIL THE NEXT DECADE.

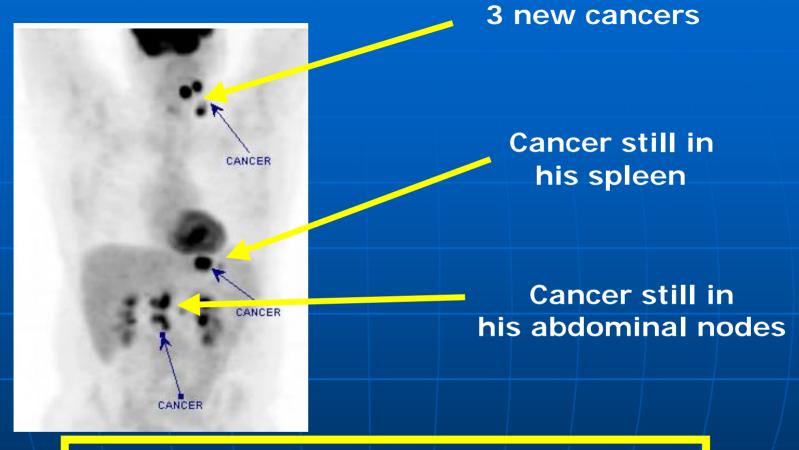
### Case 1:

42 year old male with history of Lymphoma. Has had 6 cycles of chemotherapy. His follow-up CT's have shown resolution of all lesions by size criteria with the exception of a persistent 5 cm spleen lesion that has been stable over several months. Patient had a negative Gallium scan.

This is a standard workup. He would have been told by his doctor:

NO EVIDENCE OF CANCER, WE'LL FOLLOW
YOU IN 4-6 MONTHS.

#### His Doctor ordered a PET scan:



HE NEEDS IMMEDIATE AND AGGRESSIVE THERAPY!!!

The government won't consider even looking at Lymphoma patients until maybe the next decade!!!

Case 2: MR. GABE BELANGER.

This is the case which may eventually result in the government being forced into introducing PET for the benefit of cancer patients.

#### Case 2:

'Gabe' has colon cancer. Has surgery December 2003. His conventional work-up including CT and MR suggested he had a benign growth called an hemangioma in his liver.

He receives standard chemotherapy.

By June it becomes obvious from his CT that he really had cancer of the liver, and now has 4 lesions in his liver.

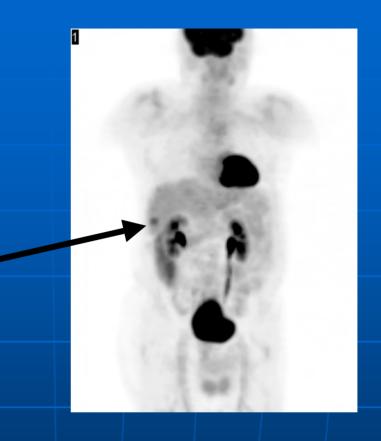
(PET scanning in December would have shown that he already had cancer spread to his liver)

- At his own expense he goes to the MAYO CLINIC and a surgeon removes the 4 lesions in August.
- He has his standard follow-up CT in Sudbury in December and the report reads:
- "There is progression of the cancer in his liver."

# HE AND HIS FAMILY ARE DEVASTATED BY THE NEWS.

He talks to me about the possibility of a PET scan.

PET scan is performed:

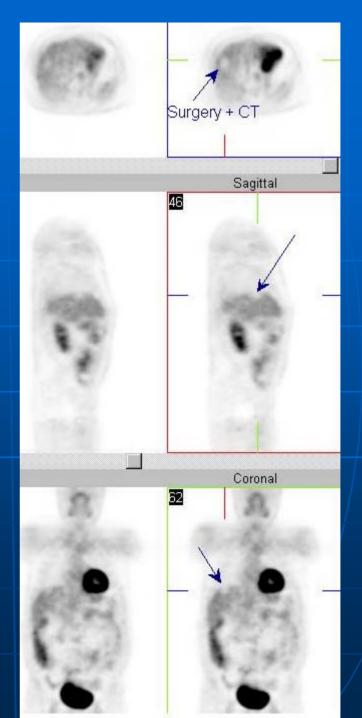


THE PET SCAN SHOWS THAT THE CT CHANGES WERE MOST LIKELY SCAR TISSUE.

IT SHOWS HE HAS ONE NEW CANCER IN HIS LIVER ~ 1.5 cm IN SIZE!!

Where the CT showed a mass, the PET shows a 'cold' area:

**SCAR NOT CANCER** 



# Gabe and his family went from thinking he should get his affairs in order to:

# WE SHOULD BE ABLE TO TREAT THIS SUCCESSFULLY.

# Gabe's first response is to say "We need better radiologists"

- HE IS WRONG!
- CT, MR AND US, ARE EXCELLENT FOR DETECTING THE SIZE SHAPE AND LOCATION OF 'MASSES'

HOWEVER THEY TYPICALLY CANNOT TELL

WHETHER THE 'MASS' IS CANCER OR SOMETHING

LIKE SCAR TISSUE.

The Ministry of Health is well aware that current research is suggesting that in colon cancer patients followed with PET that their chances of survival at 3 years:

### **ARE IMPROVED BY UP TO 70%**

Yet the MOH refuses to even consider studying colon cancer patients!!

### THESE ARE NOT EXCEPTIONAL CASES!

PET SCANNING WOULD CHANGE

THE MANAGEMENT IN

AN AVERAGE OF <u>30%</u> OF CANCER PATIENTS

• Official party 'mantra' is there is insufficient evidence to show effectiveness of PET in cancer management.

Quote from Spokesman for Alberta Ministry of Health:

"PET has real value...We looked at the evidence, and it became obvious"

Based on the same 'lack of evidence'
France is installing 75 PET scanners for the benefit of it's cancer patients.

#### THE WORLD SITUATION FOR PET?

A draft working paper published on July 29, 2004 from England states

"the evidence of benefit from PET scanning is now sufficiently robust to support the establishment of facilities across the country so that all appropriate patients can have access to this technology."

"Every cancer network must have rapid access to PET scanning for staging disease".

• To add insult to injury, even though the MOH states:

#### "PET IS UNPROVEN TECHNOLOGY"

## THEY ROUTINELY PAY UP TO \$6000 US PLUS TRAVEL EXPENSES TO HAVE PET SCANS IN US !!!

- If declared medically necessary would have to pay for all Ontario cancer patients.
- Yet to pay to US PET company THEY HAVE TO DECLARE
   IT A MEDICALLY NECESSARY TEST FOR THE PATIENT!!

• The Ontario Government is praising it's HEALTH TECHNOLOGY ASSESSMENT (HTA) on PET at a cost of 4.5 million dollars.

• 4 Research sites funded for only 32.5 PATIENTS/ YEAR!!!

• Governments Bill 8 will not allow to run deficits!

• Number of patients required to complete government trial before they will consider funding PET under OHIP???

1500 patients !!!

Dr. Al Driedger wrote a letter to Mr. Smitherman In April 2004.

Ontario is a decade behind the rest of the world.

There are individuals (MOH) who are denying the evidence.

The HTA is being used as a tool to delay PET

Mr. McGuinty and his Liberals promised Ontario would have a world class medical system.

# THOUGH APPARENTLY NOT FOR OUR CANCER PATIENTS.

I believe it's time Ontario's physicians
and cancer patient's
ask the government why Ontario is rapidly
becoming the last medical jurisdiction of significance
in the world to introduce
PET SCANS FOR THE BENEFIT OF OUR
CANCER PATIENTS?

#### Mr. Smitherman is well informed about PET:

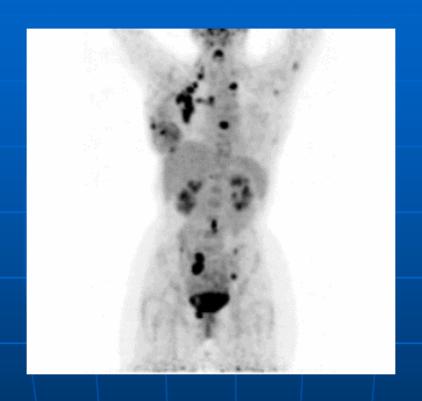
The CBC just aired a documentary of an Ontario patient's experience in our Health Care System. This patient had a PET Scan.

Mr. Smitherman refused to be interviewed

on PET scanning in the province.

WHY ????

#### PET SCAN IN PATIENT WITH BREAST CANCER



# THE GOVERNMENT PET RESEARCH STUDY HAS YET TO SCAN A SINGLE BREAST CANCER PATIENT