

# *A Plug for Hair: The “long and short” of monitoring medication levels in hair*



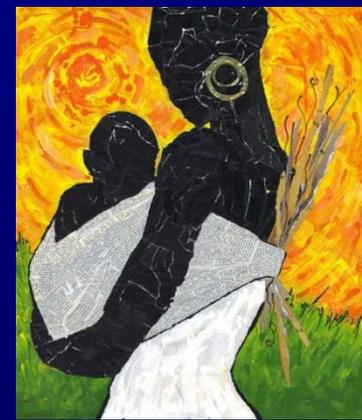
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SMARTT CAB Meeting

Monica Gandhi MD, MPH

Associate Professor, University of California, San Francisco (UCSF)

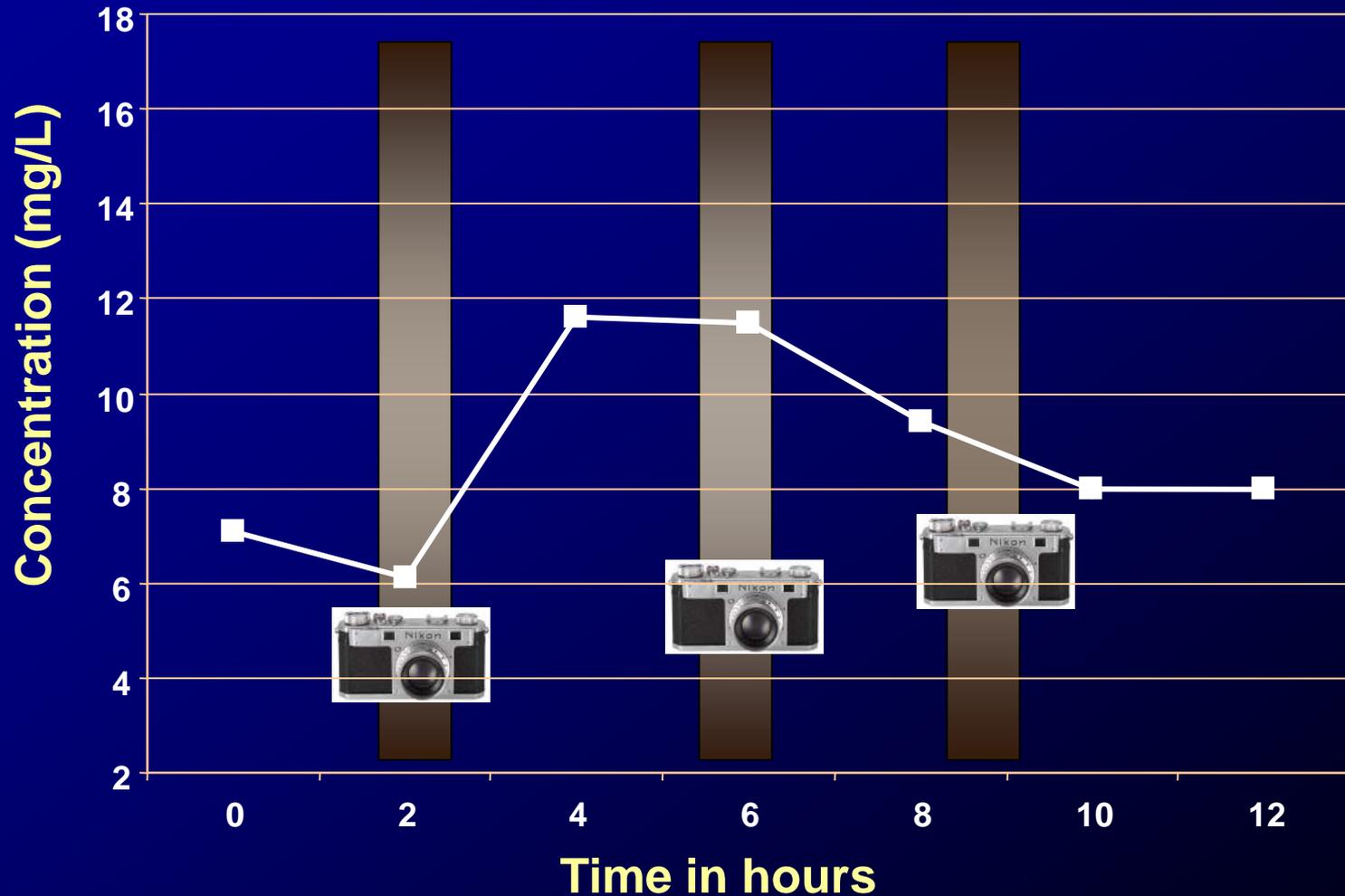
# *Why collect hair in the SMARTT study?*



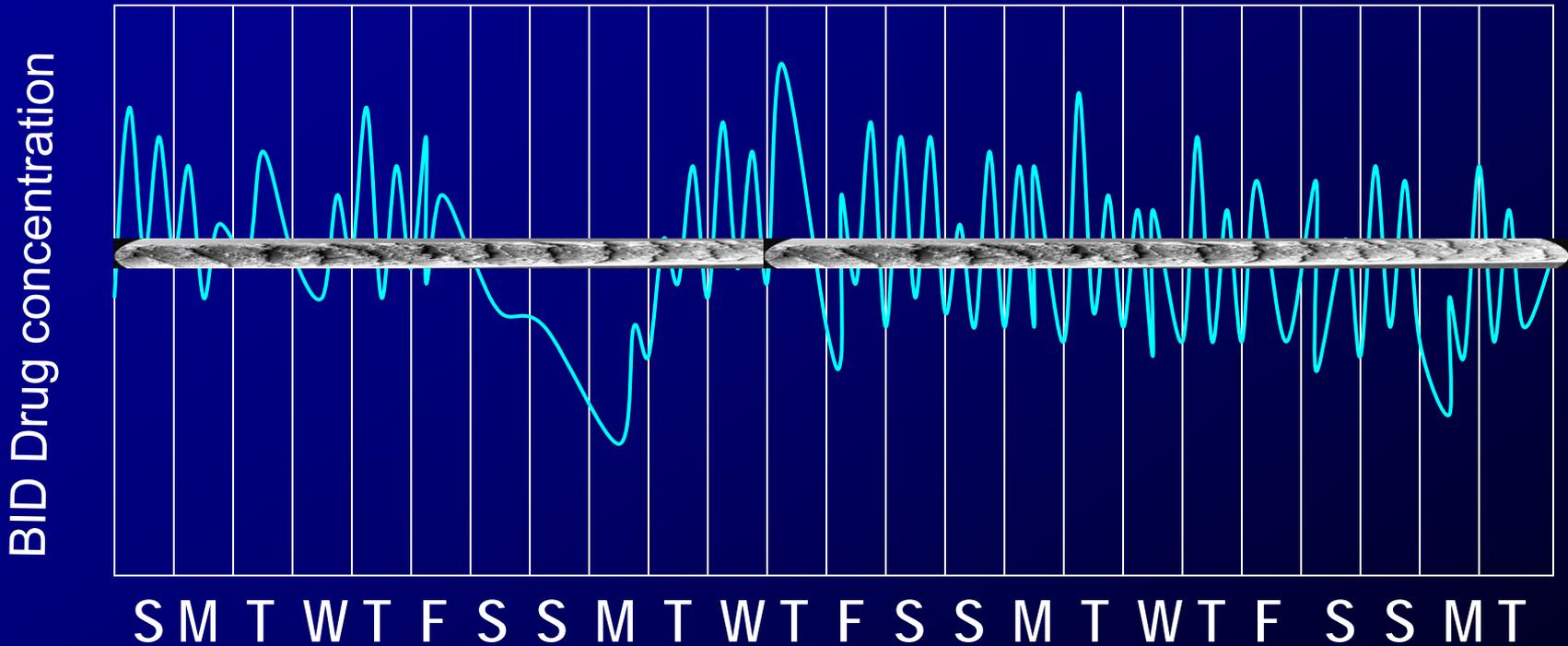
- Mothers in SMARTT are on antiretrovirals and pregnant
- No real way to know how much drug transfers from mother to baby during pregnancy
- Taking hair levels and measuring drug might help us understand how much drug transfers from mother to baby during pregnancy

*When you look at a drug level in plasma, this just gives a “snapshot” of exposure*

Plasma drug levels over 12 hours



*How to measure how much drug mom is taking on average and passing on to baby?*

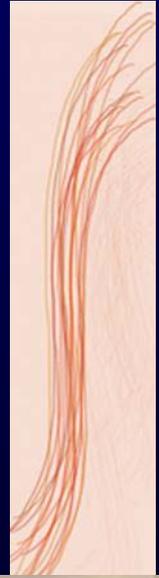


**HAIR IT IS!!!!**

# *Drug measured in a small sample of hair gives idea of average exposure over ~ 1 month*



- Humans lose about 100 hairs per day from their scalp
- We collect 100 hair strands for our assays!
- Collect once from mother and baby at delivery



60100026  
Visit 19

# *Easy six step process*

- Takes about 2 minutes of time once staff gets a hang of it
- Tiny snip of hair cut from back of the head
- Painless – no need for blood draw!
- Sample can be stored at room temperature and is not hazardous (hair doesn't transmit HIV)



# *Materials required*



- Small pair of scissors
- Alcohol wipes
- Hair collection “kit” sent to sites

*Step 1: Wipe down scissors with alcohol pad*



*Step 2: Isolate thatch of hair from underneath the top layer of about 20 strands*



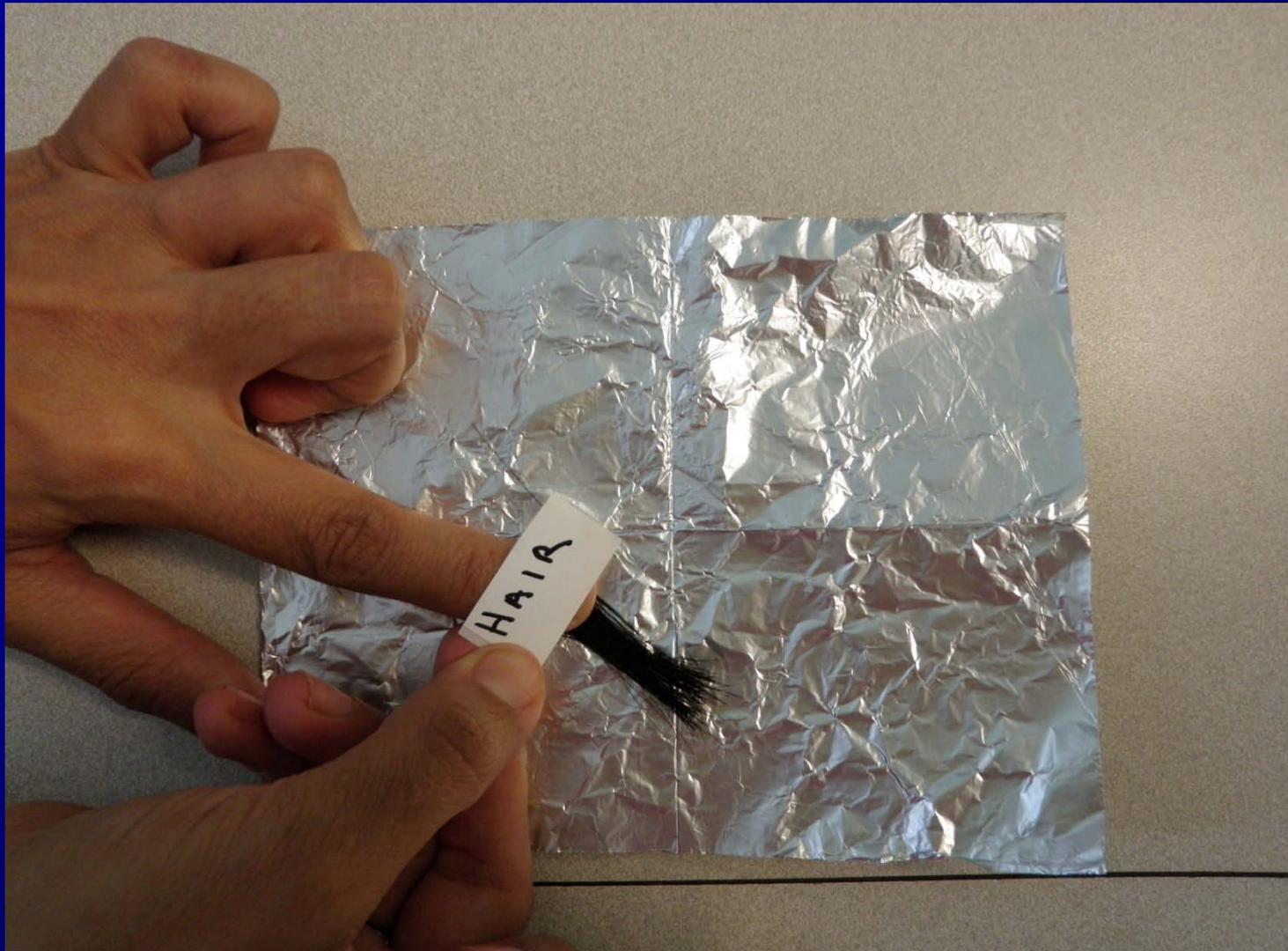
*Step 3: Cut the 20 strands of hair  
keeping fingers firmly on part farthest  
from scalp ("distal end")*



*Step 4: Put hair down on tin foil with fingers over the far end*



*Step 5: Label distal end with patient label to be taped directly to tin foil*



*Step 6: Fold piece of tin foil over hair, place tin foil in plastic bag, seal and store at room temperature*



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Thank you!

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Make the Promise.

Each of us can help stop the spread of HIV and reduce the impact of AIDS. You don't have to be a top scientist working on a cure to make a difference. Protecting yourself and others from HIV infection, welcoming someone living with HIV into your life or even just talking about HIV and AIDS can help. Are you taking action?

Make your promise now at [www.worldaidscampaign.org](http://www.worldaidscampaign.org)



concept: Manish Singh, network: [unreadable]