CASE REVIEW #2

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Neuroendocrinology: The Normal Neuroendocrine System

Satya P. Kalra, Pushpa S. Kalra, in Progress in Brain Research, 2010

Introduction

The cause and effect relationship between nutrition, energy imbalance and human health has been appreciated since time immemorial (Bray, 1998; Kalra and Kalra, 2005). Therapeutic strategies adapted in ancient civilizations to alleviate pain and suffering from metabolic diseases are still in vogue. Clinical observations at the turn of the 20th century suggested that abnormal architecture of the basal aspect of the brain was associated with obesity in some patients. Indeed, experimental evidence in the 1940s and 1950s that electrolytic lesions in the ventromedial hypothalamus (VMH) elicited relentless hyperphagia, weight gain

Components of Problem Solving

Mehmet Eskin, in Problem Solving Therapy in the Clinical Practice, 2013

Ability to Think About Cause and Effect in Social Situations

Social events contain complex cause-and-effect relationships. One event may be both the cause and the result of another event. Therefore, one should be able to associate the consequences with the correct causes and should be able to think about the nature of the complex relationships in a flexible manner. People who are successful in problem solving are able to consider the cause-and-effect relationships within social events despite their complex nature.

This complex cognitive ability is important for the development of

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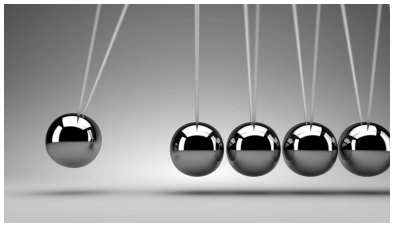

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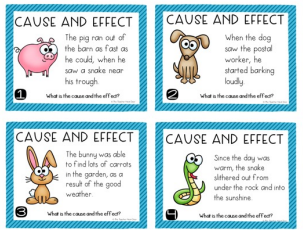

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In Mammography

It's the way you "set up" the machine

- Angle
- Height
- Paddle size

The way you "set up" the patient

- Facing forward
- Step towards you on the MLO

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What you do with the machine….and the patient (and the breast) will effect what you see on the image!

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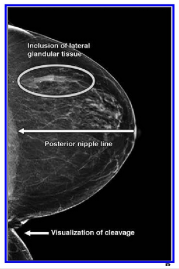

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Quick Steps for the CC (Left)

___ 1. Elevate breast/IMF (until the PNL is perpendicular to the chest wall)
___ 2. Adjust IR height (so top edge is parallel with elevated IMF)
___ 3. Pull breast onto IR with both hands (left hand on top; right hand on bottom). At the same time ask the patient to step forward into the machine (not to lean in) and have her turn her face towards you
___ 4. Anchor breast with the base of your right thumb (after switching hands)
___ 5. Lift the other breast onto IR with your left index finger in the IMF against the rib cage and your left thumb on the top of the breast and ask the patient to turn her right hip forward
___ 6. Guide the patient's head forward and around the face shield, if possible
___ 7. Place your left elbow and forearm at the mid thoracic region (where her bra clasp would be) and gently push the patient forward
___ 8. Relax her left shoulder with your left hand
___ 9. Pull superior breast tissue forward, if possible, then apply compression while continuing to "push" the patient forward and pulling

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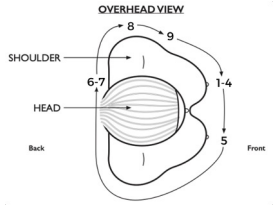
Quick Steps for the CC (Left)



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RCC: Steps 1-9 (Front)

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Must follow each step!

- Leave out a step, leave off breast tissue
- Do more steps than necessary, waste of time and increases possibility for errors
- The more variables, the more the chance for errors!

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Cause CC Effect

- Patient facing forward
- Elevating the IR properly
- Pulling breast on with both hands
- Anchoring the breast
- Lifting other breast up and over

↑ visualization of all breast tissue
↑ superior breast tissue
↑ posterior breast tissue (short PNL)
↑ posterior, superior breast tissue
↑ posterior, medial breast tissue (cleavage)

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Cause CC Effect

- Patient turns hip towards IR
- Push patient forward
- "Crawl" up the breast

↑ posterior, medial breast tissue
↑ posterior, superior breast tissue
↑ posterior, superior breast tissue

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Before | After

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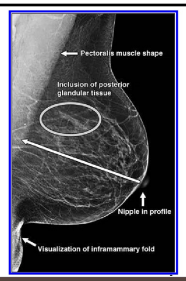

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Quick Steps for the LMLO

___ 1. Stand perpendicular to the patient
___ 2. Lift patient's left shoulder/arm up over the corner of the IR with your left hand in the patient's axilla. At the same time, your right hand should "meet" your left hand in the axilla and help to lift the patient's left shoulder up and over the IR
___ 3. IR is placed in back of axilla (just interior to latissimus dorsi)
___ 4. Patient's left hand should be resting on bar, with their elbow bent behind the IR
___ 5. Place your left hand on patient's left shoulder
___ 6. Your right hand slides down lateral side of breast to pull on lateral breast tissue and smooth out any skin folds
___ 7. Once your right hand is at the bottom of the breast, turn your hand over so that your hand is now palm down on the breast with the base of your thumb just anterior to the IMF
___ 8. Push the breast up and out with the base of your thumb
___ 9. At the same, ask the patient to lift and flatten their other breast. Caution: Do not ask the patient to pull their breast back
___ 10. Continue to hold the breast in the up and out position until compression is complete

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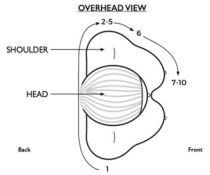
Quick Steps for the LMLO



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RMLO: Steps 1-10 (Front)

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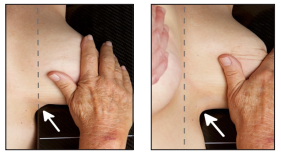
Move the Patient Towards You **Before** You Start Positioning!



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Cause **MLO** Effect

Cause	Effect
Patient facing forward	↑ visualization of all breast tissue
Choosing the correct angle	↑ medial breast tissue/longer pec
Lowering the height of IR	↑ relaxed muscle/straight/convex
Move patient towards you	↑ visualization of IMF
Lifting the shoulder up and over IR tissue	↑ posterior, superior breast
Corner of IR placed just in front of latissimus dorsi	↑ posterior, superior breast tissue, wider muscle at top of image

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Cause **MLO** Effect

Cause	Effect
Elbow relaxed behind IR/hand relaxed	↑ relaxed muscle, ↑ compression
Smooth lateral, posterior breast tissue	↑ lateral breast tissue, ↓ folds
Have patient lift and flatten other breast	↓ folds in IMF
Hold the breast up and out	↑ visualization of anterior breast
Maintain up and out until compression is complete	↓ sagging breast/superimposition of structures

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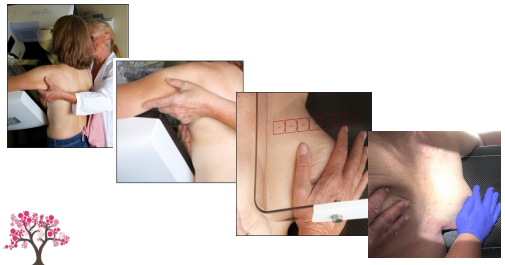

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