

## **Spine/Chiropractic**

# **Anatomy and Positioning Unit**

**Prepared by:** 

### Carolyn J. Frigmanski, M.A., B.S.R.T. ® Founder

Ohio Department of Health Approval for 4 continuing education hours.



#### Dear S.T.A.R.S. participant,

Welcome to your educational unit on anatomy and positioning that has been approved by the Ohio Department of Health. To receive full credit, you must return ALL of the completed post tests in this unit for evaluation by a S.T.A.R.S. official. The post tests include:

**Descriptive Terminology for Reference** 

#### **Identified Anatomic Diagrams for Reference**

#### **Identified Radiographic Anatomy for Reference**

and

#### **Positioning Guide for Reference**

You will receive a signed original certificate of completion with accreditation numbers printed on it for verification of a passing score of 75% or higher on the contents of the entire unit. If you do not send in all the post tests or receive less than a 75%, a S.T.A.R.S. official will send the contents back to you for re-evaluation and return. There will be no charge for this service.

If you have any questions, feel free to contact the S.T.A.R.S. office for information.

I hope you enjoy this self-learning product and refer others to our educational services.

Sincerely,

Carolyn J. Frigmanski, M.A., B.S.R.T. ® Founder



- Please do NOT return the entire product! It's yours to keep except for the post test pages! I hope it will be a useful resource for you and others in your practice.
- You only need to fill out the information re: your name as you want it to appear on your certificate, your desired number i.e. social security number, last 4 digits of s.s. number or your license number; your address, etc. if the product you selected has multiple pages. You can initial the other pages and secure the group of pages with a staple so they don't become separated.
- Please use the correct postage when you return your post tests so delays are not incurred from insufficient postage.
- You can do the selected product only **ONCE**. Make other choices in the future.
- Others can share your media by ordering additional post tests at a reduced price. Group discounts are available too. Go to the GXMO Order Form tab for details.
- Don't forget to use the GXMO Order Form tab to select your next self/distance learning product for your license renewal in the future.



Dear GXMO/LSO/LSR participant,

#### Welcome to your selected S.T.A.R.S. developed continuing education home study!

In the spring of 2013, The Ohio Department of Health (ODH) approved ALL of them for GXMO license renewal. Please check with your state licensing agency if you are not a licensed GXMO in Ohio to be sure your state accepts these ce credits for your state license renewal requirement.

This product consists of a text on a desired topic and multiple question, short answer post test(s) pages. The number of Ohio Department of Health approved continuing education (ce) credits is listed on our order form. This home study product was originally developed for radiographers across the country who were registered with the American Registry of Radiologic Technologists (ARRT) and approved by the American Society of Radiologic Technologists (ASRT). Please disregard any reference to the ASRT/ARRT within this product, if any.

You must complete the reading and questions with a **75% or higher score** on the post test(s) to get your approved CE credit!

Please return all the post test pages to the **S.T.A.R.S.** address listed on our letterhead **BEFORE** your license expires. We will forward your certificate of completion on the same day your post test(s) were evaluated (except for holidays and Sundays). If you did NOT receive a 75%, we will send the pages back with the questions needing a new answer selection. Send them back for a **FREE** re-evaluation. No refund will be provided for unsatisfactory personal performance on any ce product.

Plan the return of your post test(s) pages in a timely manner. I cannot accept emailed or faxed copies since I need to retain my **ORIGINAL** records for the ODH for 3 years in case you may be audited.

Remember to get your envelope weighed at the post office whenever submitting more than 4 pages. The post office will return it to you if you have insufficient postage, thereby delaying it for my evaluation and your certificate of completion.

Feel free to contact me by email: **info@xrayhomestudies.com** or telephone: **419 471-1973** if you have any questions. Please share with others in the future.

Thank you for selecting S.T.A.R.S. to meet your continuing education needs!

Sincerely,



#### How to renew your GXMO license in Ohio:

The Ohio Dept. of Health (ODH) requires a **minimum of 12 continuing education credits (ceus) to be completed every 2 years (your biennium) BEFORE your license expires**. You may do more than 12 ceus, but not less than 12 ceus, if you so choose. Ceus in excess of 12 cannot be carried over to the next biennium.

You will receive a hard copy renewal notice by mail from the ODH 60 days **BEFORE** your license expires. It is your responsibility to amend your personal information to the ODH whenever you change your name, address or place of employment as soon as possible by using the ODH website or contacting the ODH by telephone at 614 752-4319 for assistance. Failure to receive an ODH notice is not an acceptable reason for failing to renew on time. You can add completion of clinical modules to your GXMO license on the ODH web site.

Your ODH notice informs you that you may renew online or request a hard copy form from them. You must have your S.T.A.R.S. certificate(s) of completion immediately available when you renew since your course title(s), number of ceus, and ODH accreditation number(s) and date(s) of completion are printed on it.

You can renew immediately when you receive your notice or you have 30 days to complete the renewal process and payment to the ODH after your license expires. Online renewal requires your credit card for payment. If you chose hard copy renewal, you may submit a check or money order.

You and/or your employer can view and/or print your renewed license on line upon completion of the process. Problems that exist with renewal should be addressed to the ODH by calling for assistance.

**S.T.A.R.S. personnel are NOT responsible for your renewal.** Please direct any questions or needed assistance with renewal to the ODH personnel.

GXMOs must notify the ODH in writing within 30 days of any changes in the physician providing direct supervision. If your scope of practice changes (e.g. chiropractic to podiatric), a competency form must be completed and submitted to the ODH.

You may also want to check the ODH web site periodically for changes that may have occurred during your biennium and to share this information with your co-workers and/or administrative staff members.

#### The ODH website is: http://www.odh.ohio.gov/odhPrograms/rp/rlic/ristatus.aspx

#### Email is: BRadiation@odh.ohio.gov

Thank you very much.



#### **Instructions for Mailing your Continuing Education Post Tests**

Complete ALL hard copy unit post tests for the products you purchased in legible printing BEFORE your license expires. Mail is processed the same day it is received.

You may want to copy them BEFORE you mail them to the S.T.A.R.S. office to minimize mail delivery complications. They will NOT be returned to you unless you get a 75% or less. If you do NOT get a 75% or better after evaluation, the post tests will be sent back to you with the questions needing a new answer selection. After completing the questions, send them ALL back to the S.T.A.R.S. office for re-evaluation.

Be sure to use the CORRECT postage by having it weighed at the post office if it consists of more than 5 pages. Envelopes with INSUFFICIENT POSTAGE will be sent back to the participant and delay your post test evaluation and certificate creation.

I do NOT accept faxes since faxes fade over time and I need to keep my records for 3 years in case you would get audited by the Ohio Dept. of Health for some reason.

I do NOT accept scanned pages because I do NOT want you putting your private, personal information on the internet. I do NOT open attachments due to the threat of virus contamination that may jeopardize my web site and computerized databases.

Do NOT send your study media i.e. CD, DVD, booklets and/or books back to me.

#### United States Postal Service (USPS):

If you are using USPS for priority or express mailing, please keep your receipt with the tracking number in case of a problem with the delivery. Please mark the section for NO SIGNATURE REQUIRED for express mail and send it to my home address: Carolyn J. Frigmanski, MA, BSRT (R) 3134 Aldringham Road Toledo, Ohio 43606. The USPS does NOT deliver to my P.O. Box address. Please call to let me know I should be expecting it at 419 471-1973.

#### FedEx or United Parcel Service UPS:

If you are using these delivery services, please keep your receipts with the tracking number in case of a problem with the delivery. Please mark the section for NO SIGNATURE REQUIRED for express mail and send it to my home address: Carolyn J. Frigmanski, MA, BSRT(R) 3134 Aldringham Road Toledo, Ohio 43606. Please call to let me know I should be expecting it at 419 471-1973.

Thank you very much.



Section: Descriptive Terminology This information is provided as hard copy in this unit. Define the following terminology relative to radiographic equipment & positioning.

#### **Prelude to Clinical Training:**

- 1. collimator
- 2. central ray
- 3. image receptor
- 4. latent image
- 5. technique chart
- 6. patient positioning aids
- 7. transverse
- 8. longitudinal
- 9. kVp
- 10. remnant radiation

#### Attachment B

- 1. supine
- 2. decubitus
- 3. recumbent
- 4. anterior position
- 5. oblique position
- 6. caudal/caudad
- 7. distal
- 8. dorsal
- 9. cephalic/cephalad

10. lateral

11. medial/mesial

12. palmar

13. plantar

14. proximal

15. ventral

#### Attachment D:

1. density

2. long scale of contrast

3. film contrast

4. exposure latitude

5. subject contrast (in film radiography)

6. recorded detail

7. brightness

8. dynamic range

9. receptor contrast

10. subject contrast (in digital radiography)

Fill in the following information so that you can receive a signed certificate of completion from an official from **S.T.A.R.S.** when all the sections of the entire unit are completed.

Name					
Address			•••		
		-			
Social Se	ecurity Number (optional) _	-		Date	



### Section: Identified Anatomic Diagrams for Reference This information is provided as hard copy in this unit.

1. The lumbar region is also referred to as the \_\_\_\_\_.

2. The vertebra prominens identifies the long process of cervical vertebra #\_\_\_\_\_.

3. The iliac crest is at the lumbar vertebral interspace of # \_\_\_\_\_ and \_\_\_\_\_.

4. There are \_\_\_\_\_ cervical; \_\_\_\_\_ dorsal/thoracic; and \_\_\_\_\_ lumbar vertebrae.

5. The dens is located on the cervical vertebra called the \_\_\_\_\_.

6. The spinal cord is located in the \_\_\_\_\_ canal.

7. The dorsal/thoracic vertebrae have \_\_\_\_\_\_ for the rib tubercles.

8. The junction of the lamina on lumbar vertebrae forms the \_\_\_\_\_\_ process.

9. The of the sacrum meets the fifth lumbar vertebra.

10. There are #\_\_\_\_\_ segments to the sacrum and # \_\_\_\_\_ segments forming the coccyx.

Fill in the following information so that you can receive a signed certificate of completion from an official from S.T.A.R.S. when all sections of the unit are completed.



Section: Identified Radiographic Anatomy Diagrams for Reference This information is provided as hard copy in this unit.

1. The dens is visible in the AP projection with the \_\_\_\_\_ position.

2. Depressing the shoulders helps to visualize all seven cervical vertebrae in the

\_\_\_\_\_ position.

3. Cervical obliques demonstrate the \_\_\_\_\_\_ foramina.

4. The method is frequently used to demonstrate the cervicothoracic vertebrae.

5. To be sure you have included all of the thoracic/dorsal vertebrae, you must visualize cervical #

\_\_\_\_\_ and lumbar # \_\_\_\_\_.

6. The lateral borders of the \_\_\_\_\_\_ muscles should be visualized on an AP lumbar spine projection.

7. The \_\_\_\_\_\_ joints are best visualized on lumbar obliques.

8. Small cone down lateral views with shielding are usually performed to best demonstrate the

junction.

9. An AP projection is performed to demonstrate the sacrum without super-

imposition of the surrounding bony pelvis.

10. The SI abbreviation refers to the union of the \_\_\_\_\_\_ and \_\_\_\_\_.

Fill in the following information so that you can receive a signed certificate of completion from an official from S.T.A.R.S. when all sections of the unit are completed.

Name

Address

Social Security Number (optional) \_\_\_\_\_- \_\_\_\_ Date \_\_\_\_\_



#### Section: Positioning Guide for Reference This information is provided as hard copy in this unit.

- 1. A 15 20 degree \_\_\_\_\_\_ tube tilt is used for AP axial projections of the C spine.
- 2. The lower margins of the upper \_\_\_\_\_\_ and the \_\_\_\_\_\_ of the skull must be lined up correctly for an AP "open mouth" projection.

3. For trauma patients, a lateral cervical position is performed with a \_\_\_\_\_\_beam.

- 4. The CR is directed to the level of when executing cervical oblique positions.
- 5. The 2 views needed to show the natural spinal curvature, range of motion and ligament stability are

called \_\_\_\_\_\_ and \_\_\_\_\_.

- 6. Cervical collars should \_\_\_\_\_\_ be removed on trauma patients until after physician evaluation.
- 7. A \_\_\_\_\_\_ compensatory filter may be used for dorsal/thoracic imaging.
- 8. The patient's knees should be \_\_\_\_\_\_\_ to open disk spaces on AP lumbar views.
- 9. To get good lateral lumbar spine radiographs, the \_\_\_\_\_\_ axis of the spine needs to be parallel with the table.
- 10. The body rotation for lumbar obliques is \_\_\_\_\_\_ degrees.
- 11. AP axial sacrum projections require a \_\_\_\_\_\_ degree cephalad tube tilt.
- 12. \_\_\_\_\_\_ collimation is essential to reduce patient dose and get high-quality images.
- 13. The SI joint of interest is \_\_\_\_\_\_ in posterior oblique positions.
- 14. The \_\_\_\_\_\_ method is used to differentiate deforming (primary) from compensatory (secondary) curves in scoliosis patients.

Fill in the following information so that you can receive a signed certificate of completion from an official from **S.T.A.R.S.** when all sections of the unit are completed.

Name				
Address				 
Social Security Number (optional)	-	-	Date	