You are viewing the second opinion for the nuclear bone scans discussed at this link: <u>http://rawarrior.com/a-new-reading-of-the-nuclear-bone-scan-credibility-is-everything/</u> See also the original report at the bottom of this PDF.

DATE OF SERVICE: 2/15/2011 2:03:35 PM PATIENT NAME: YOUNG, KELLY ACCOUNT NUMBER: XXXXXX DATE OF BIRTH: XX/XX/19XX REFERRING PHYS: XXXXXXXX, XXXX

# BONE SCAN:

HISTORY: Rheumatoid arthritis.

**TECHNIQUE:** The images are submitted on 03/29/11. The images were obtained on 02/15/11. On that date, the patient was given 28.6 mCi of Tc 99m MDP. Delayed imaging was performed in the anterior and posterior whole body projections. Focal projections of the hands and wrists and feet and ankles were also obtained, and focal imaging of the skull was also obtained.

# FINDINGS:

AXIAL SKELETON: There is a focal area of increased uptake identified along the left lateral aspect at the C1-C2 interface. No other evidence for increased uptake is identified in the skull, spine, ribs, or pelvis.

APPENDICULAR SKELETON: There is clearly abnormal signal identified within the hands and wrists. There is a focal asymmetric area identified involving increased uptake of the left wrist. This is worse along the ulna aspect of the wrist, in the region of the lateral radius, distal ulna, triquetrum, and the hamate bone. This can be seen on both the dorsal and palmar projections, and it does not represent an artifact. There is also a small focal area of increased uptake involving the right wrist which is in the region of the triquetrum and distal ulna. There are also areas of mild increased uptake involving the metacarpophalangeal joints of both the right and left hands. There is also focal increased uptake identified involving the first interphalangeal joint.

Examination of the feet and ankles demonstrate that there is asymmetric uptake involving the right ankle foot along the plantar aspect. There is also a mild increase in uptake along the region of the metatarsophalangeal joints of both the right and left feet

There is also evidence for increased uptake identified within the carpal bones of both the right and left wrists. This is a generalized area of increased uptake involving the bilateral carpus, as well as the carpometacarpal joints. There is also a generalized area of increased uptake involving the metatarsophalangeal joints and the tarsometatarsal joints of the bilateral feet. These areas of increased uptake are typical for rheumatoid arthritis.

# **IMPRESSION:**

1. This is an abnormal bone scan with multiple imaging findings that include abnormal findings in the cervical spine, wrists, and the feet.

2. In the cervical spine, there is a focal area of abnormal activity involving the left side of the C1-C2 region. The significance of this finding is uncertain, and it may represent cervical pathology at this site. I recommend clinical correlation to determine if the patient may have symptoms of neck pain. If the patient is symptomatic in this region, further evaluation with plain films, MRI, or both may be of benefit to determine the nature of this abnormal tracer uptake. It should be noted that rheumatoid arthritis can involve the C1-C2 interface, and this may be a manifestation of the patient's known rheumatoid arthritis. **See Figure 1, image 6 of series 1000.** The arrow that is pointing to the cervical spine demonstrates the area of abnormal uptake in this region. Note that this looks different than the right side, which is also included on this image.

3. There is clearly abnormal uptake involving the left wrist. The area of abnormal uptake predominantly involves the ulnar aspect, and it involves the lateral aspect of the distal radius, the distal ulna, the region of the triquetrum, and the hamate bone. This abnormal uptake along the carpus on the left side is of uncertain significance, and differential considerations are broad. However, given that the patient has rheumatoid arthritis, this may be a manifestation of active rheumatoid arthritis in the left wrist. **See Figure 1, image 6 of series 1000.** The large arrows on the images of the wrist are pointing to the abnormal uptake in the left wrist. This is clearly asymmetric in comparison with the right wrist, and it is seen on both the dorsal and palmar images, and therefore it is an actual finding.

4. There is also focal increased uptake involving the right wrist in the region of the distal ulna and triquetrum. This may reflect an area of focal arthritis at this site. **See Figure 1, image 6 of series 1000.** The small arrow that is pointing to the wrists is pointing to the abnormal area uptake involving the right wrist.

5. Diffuse abnormal uptake is identified involving the carpus of both wrists, the metacarpophalangeal joints, and the carpometacarpal joints. This uptake is typical for rheumatoid arthritis. **See Figure 2, image 7 of series 1000.** The arrows are pointing to the region of the metacarpophalangeal joints. However, there is also obvious increased uptake in the region of the carpus of both wrists.

6. In the feet, there is evidence for increased uptake identified involving the right calcaneus. This is a nonspecific finding, and it typically seen in cases of plantar fasciitis. However, there are multiple other causes for this increased uptake, including stress fracture. This is not a typical location for rheumatoid arthritis. **See Figure 3, image 5 of series 1000.** The large arrow is pointing to the area of increased uptake in the right calcaneus, and it is clearly obvious that this is asymmetric in comparison with the left foot.

7. There is also evidence for increased uptake involving the metatarsophalangeal joints and the tarsometatarsal joints. This is a typical manifestation for rheumatoid arthritis. **See Figure 3, image 5 of series 1000.** The arrows are pointing to the region of the metatarsophalangeal joints and the metatarsophalangeal joints, and the areas of increased uptake can be seen on this image.

8. In summary of the above findings, there are findings within both the hands and the feet which are typical for rheumatoid arthritis. In addition, there is evidence for an active area of increased uptake involving the lateral aspect of the left wrist, and this may represent active rheumatoid arthritis at this site. In addition, there is an area of increased uptake identified involving the right calcaneus. This is an atypical location for rheumatoid arthritis, and it is more typical for plantar fasciitis at this site, or possibly a stress fracture. If further evaluation of this region is desired, MRI may be of benefit. There is also an area of increased uptake involving the left side of the C1-C2 level in the cervical spine, which is a nonspecific finding, but this can also be a manifestation of rheumatoid arthritis.

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### Below is the original bone scan report

### YOUNG,KELLY DIM XXXXXX, XXXX,M.D. RHEAUMOTID ARTHRITIS

EXAM# TYPE/EXAM RESULT XXXXXXX BONEW BONE SCAN -WHOLE BODY 2/15/2011 RADIONUCLIDE BONE SCAN

INDICATION: Rheumatoid arthritis.

TECHNIQUE: Delayed anterior and posterior whole-body scintigrams were obtained following the intravenous injection of 28.6 mCi Tc 99m MDP.

FINDINGS: The examination failed to demonstrate any focal hot uptake in the axial or the appendicular skeleton to indicate a metastatic or active osteoblastic bone lesion. The uptake in the appendicular skeleton appears symmetric. There is urinary excretion of the radiopharmaceutical.

IMPRESSION: UNREMARKABLE RADIONUCLIDE BONE SCAN.

Dictated Date/Time: 02/15/2011 03:17 PM Transcribed Date/Time: 02/15/2011 03:52 pm Signed XXXXXXX