

_____ Case Screening Notes

Sarah Kaminski

11/11/03

For _____

Merit

While I do find some areas of negligence in this case, I think it would be a difficult case to prove. It is almost impossible to prove when and where _____ acquired the MRSA (methicillin resistant staph aureus) infection in her wound. My opinion is that she may have acquired it sometime during the weeks after her initial surgery when her husband was changing her wound dressings at home. Her hospital stay with this surgery was only approx. 23 hours, which would make it highly unlikely that she became infected then.

Background

This case is about a 42 year old female (____) who underwent abdominoplasty surgery (“tummy-tuck”) and liposuction of both thighs on 4-17-2002. Her abdominal surgical wound dehisced (broke open) approx. 3 weeks after surgery and was allowed to heal from the inside out. After several weeks of healing, the wound was sewn back together in Dr. _____’s office. The wound again broke open and was again sewn back together in Dr. _____’s office. The pt. was ultimately readmitted back to the hospital where it was found she had MRSA (methicillin resistant staph aureus) infection in her wound. She required several weeks of antibiotic therapy and an additional surgery to repair her wound.

Approx. 3 ½ months from the April surgery, ____ was readmitted to the hospital. She fairly consistently ran a fever for about 6 days, and her wound showed signs of infection. So, she probably came into this hospitalization already having acquired the infection. MRSA is often contracted in the hospital setting, but can also be contracted in the community. 20-40% of healthy people are carriers. It is very resistant to most antibiotics, though does respond well to a small group of atb.

MRSA: Colonization and Transmission

- Reservoir
 - Colonized or infected patients
 - Colonized or infected health-care worker
 - Environment
- Mode of transmission
 - On hands of health-care workers
 - Airborne
 - Respiratory secretions

Abdominoplasty removes excess skin and fat from the middle and lower abdomen and then tightens the muscles of the abdominal wall. Post-op infections are rare and most

people return to work in 4-6 weeks. A supportive binder is usually worn for 4-6 weeks post surgery.

Summary Observations

When to culture a wound is a clinical judgment made by a physician. It is a nurse's responsibility to report a suspicious wound to the physician. There is no national standard or CDC guideline for the timing of a wound culture. Most physicians use clinical signs and symptoms as the standard for when they decide to culture a wound. These would include: redness, tenderness drainage, swelling, warm to the touch at site of infection or area around, fever, foul odor, and possibly, difficulty with healing.

The main area of negligence I find in this case is that once ___ was admitted to the hospital, she consistently had a fever, and also showed other clinical signs of wound infection. It wasn't until 6 days after admission that an infectious disease consult was ordered and the wound cultured. There were 2 times on 7-26 when ___ had a temp. of 102° or greater. The MD was never called. There was no MD order for dressing changes until 7-27 at approx. 1400. There was consistently poor nurse documentation of the wound appearance. There was poor nurse follow-up of the elevated temps. It is hard to tell from the documentation whether the dressings were actually changed TID as ordered.

Another question I have is why did Dr. _____ not ever culture the wound in the 3 and ½ months of poor healing prior to ___'s admission on 7-25-02? If ___ indeed acquired the MRSA during that time, she could have received appropriate drug treatment sooner, which probably would have helped her to heal more quickly. Dr. _____'s intent in ordering the Keflex and Ancef early on was to prevent the possibility of infection. This is standard with most surgeries. The problem is that this type of "prophylactic" therapy can cause superinfection. Superinfection is the appearance of a new infection during antibiotic therapy which is caused by antibiotic-induced alteration of the normal microbial flora. It may be that Dr. _____'s action to prevent a wound infection actually contributed to the wound becoming infected with MRSA. I think that this would still be difficult to prove. There was definitely much prudent action on Dr. _____'s part, and because there is no national guideline regarding when to culture a wound, you could argue that he was within the standard of care.

Chronology

4-17-02- _____'s initial surgery. Prior to surgery, she was prescribed Keflex 500mg 4 times a day, for 7 days for prophylaxis. She was discharged from the hospital on 4-18-02 with a JP drain to her wound and abdominal binder in place. During this hospitalization, there were no fevers and no apparent complications. _____ was given 1 dose of IV Ancef pre-op and 3 doses post-op.

Legend

Wound Care

Negligence

Use of Prophylactic Antibiotic

MRSA

New Treatment Orders

4-23-02- _____'s first follow-up visit in Dr. _____'s office. Dr. _____ charted that _____ still had pain, some mild nausea and that the wound was CDI (clean, dry and intact). "No [illegible] infection, bleeding or other problems."

4-29-02-Second follow-up visit. _____ told Dr. _____ she had been standing nearly completely erect now. He encouraged her not to stand straight too fast as it "may compromise wound healing/blood supply." The drain output was much lower, so JP drain removed by Dr. _____ He charted that her bruising was much less and the swelling as expected. "The wound is healing well so far. Umbilicus and wound edges are CDI. Good capillary refill is noted. She will curb overzealous 'upright standing' so soon..."

5-2-02-Visit to Dr. _____ 20 days out from surgery. _____ having increased pain (greater than expected at this point). "Anxious and hasn't been able to stay bent over." Wound shows some [illegible] eschar (sloughing or separation of dead from living tissue)/wound separation in midline up towards umbilicus (inverted T); this wound debrided in office of some fat tissue and skin. Debridement involves removal of foreign material and dead or damaged tissue.

5-10-02-started on Keflex-prophylaxis

5-13-02-Dr. _____'s office-some fat in base of wound debrided today. Wound packed wet-dry. "No frank cellulites/infection, per se. No purulent drainage." Discussed w-d dressing changes. "Wound healing will take awhile."

5-20-02-still doing BID (twice a day) dssg. changes. c/o moderate amount pain. Wound is clean except for some peripheral fat at wound edge that was debrided today. There is granulation tissue elsewhere in wound. To continue with BID dressing changes.

5-28-02-wound improved. "Nearly granulated at all areas, but she needs to improve her peri-umbilical w-d dssg. changes. This area was minimally debrided."

6-4-02- ___ is working part-time now. Wound is clean. Edema of surrounding skin is improving (softening). Continue w-d dssg. changes.

6-11-02-husband doing well with w-d dssg. changes. Wound measures 3inches x 4inches.

6-17-02-___ is working 4-5 hours a day. Wound shrinking-measures 2&3/4 x 3&3/4. Consider wound closure under local in couple of weeks.

6-25-02-“...wound continues to heal well. Granulation tissue is noted throughout with only minimal fibrino-exudative tissue at upper end of wound. This was cleaned up.”

7-8-02-wound healing nicely. Measures 2&1/2 x 2&1/2. Discussed details of wound closure. “She knows that her wound having opened once increases risk of this occurring again: she knows that this time especially she will have to do better with not standing up straight to minimize tension on wound or it will open up...”

7-11-02-the wound was closed surgically in Dr. _____’s office. Sterile dressings applied. Drain placed.

7-15-02-wound opened [illegible] 1-2 or so. ___ uncomfortable-normal post-op pain. No [illegible] infection. Wound edges healthy.

7-16-02-___ called office-wound opened further. Very concerned. Called her PCP. Dr. ___ tried to call her back- unable to reach. Nurse spoke with her later—told to come in.

7-17-02-“urgent” surgery scheduled for GMH for today. Closure of abdominal wound. Drain placed. ***I didn’t find any records of this in the file.***

7-22-03-“wound is doing quite well: there is a small [illegible] area open in mid area, but this is superficial only: exc. capillary refill of wound edges: umbilicus doing well...” “She needs to not stand upright!” Kept on Keflex. JP intact.

7-25-02-call from husband that drain popped out. Middle area opened up more at same time to belly button. Hurting badly from waist down. Area opened-size of silver dollar. “no purulent drainage.” JP still draining enough-not ready to come out. Force necessary to pull out-quite sig. Helps explain pain-Dr. ___ focused on pain management. Admit to GMH today: started Tequin IV, PCA pump-MS, CBC, no dressing changes ordered, admission temp 99.5°, no documentation in nurses notes of wound appearance-just “dssg. with drainage” 2300 temp. 99°

7-26-02-0230-T-102-given Tylenol-no MD called

0615-T-101.9-no action taken

0740-T-101.8-no action taken

1420-T-99.9

1830-T-102.3-given Tylenol-no MD called

2000-T-102.4-no action taken

2215-T-101.6-no action taken

2245-T-100.9

No documentation of wound appearance. 0415-dressing change documented; no documentation of wound appearance. 0900- dressing changed by husband.

7-27-02-2400-T-99.8

0550-T-98.4

0840-T-98.1

1330-T-99.1

2345-T-99.9

0950-dssg. changed “incision intact with minimal [illegible] noted.”—nurse note
First MD order for dssg. changes written at approx. 1400. Wet to dry saline TID (three times a day).

7-28-02-0810T-100.8

1550-T-98.6

2030-T-100.9

2300-T-99.3

2000-nurse charts-“Dr. _____ notified of incisional heat and redness. New orders received: use NS to irrigate & NS gauze with Q-tip to pack abd. wound tid.” Also charts- “abd. wound irrig. with NS. Large mixed [illegible] drainage expressed. Some purulent. Mostly serosang. expressed. Also, small amount of serosang. from JP drain.

7-29-02 0700-T-100.2

1530-T-98.9

2300-T-100.1-Tylenol given

2310-nurse note-“abdomen red and warm to touch.”

0645-dssg. change-“wound tunnels to left 3 inches.”

1425-dssg. change-“redness and edema +3 noted around wound.”

7-30-02-0330-T-99

0707-T-98.7

1150-T-98.5

1520-T-97.9

2145-T-101-Tylenol given

2345-T-100.8

0545-pt. refused dssg. change. Stated would wait till later when MD came in.

1020-dssg. change-no foul odor. Serosanguinous drainage noted.

7-31-02-0500-T-97.8

0715-T-100.1

1530-T-97.3

2250-T-98.9

2410-nurse note-abd. Dssg. dry/intact. Redness noted at site.

0530-dssg. change-no documentation of wound appearance.

1537-(approx.)-Dr. _____, infectious disease, consulted by Dr. _____. His note- "...increasing erythema extending up her abdominal wall- acc. to pt. cannot recall any fevers prior to admission-never took her temp. Had occasional chills. Has had anorexia since original operation. Abd. Inc. with approx. 6x6x4 defect. Some purulent material. Area of firm, tender indurated erythema that extends both caudally and cranially from the incision that is almost down to her symphysis pubis and then almost up to her ribs cranially. CBC last done on 7-27-02 with WBC-11.0." Dr. _____ also states: "...pt. on Tequin for past 6 days with persistant fever. Concerned re: MRSA." States that duration of atb. therapy will probably need to be 4-6 weeks. New orders included a wound culture, Vancomycin IV and Flagyl IV.

8-1-02-0755-T-99

1745-T-95.4

2300-T-97.7

1530-PICC line placed

Home health consult ordered for home atb. until 8-27-02.

8-2-02-0815-T-97.7

1445-T-97

2325-T-97.3

1115-serous drainage noted with dssg. change.

1545-MRSA in wound. Called Dr. _____'s office to notify. No documentation of special isolation precautions taken.

8-3-02-0745-T-95.7

1700-Pt. discharged to home. Discharge orders were for HHN to do dssg. changes QD(pt. to do once a day as well), Vanco. Dosed per ID, and ID to see pt. prior to discharge. Pt. was to receive 28 day course of Vanco. And 14 days of Tequin and Flagyl PO. Following Vanco. Course- possible oral regimen for 2 weeks (Bactrim or Minocycline). To follow up in 1-2 weeks with either ID MD or nurse pract.

8-7-02-contacted by Dr. _____'s office to make follow-up appt. Pt. stated OK with daily home health RN visits-no need to see Dr. _____.

8-14-02-Dr. _____ note stating seeing ____ to render a second opinion and that she has severed her relationship with Dr. _____.

8-22-02-debridement and skin graft at _____ Surgery Center by Dr. _____.

8-23-02-Follow- up visit with ID nurse prac.in ____Clinic. Noted that pt. did not receive the intended 2 weeks of Flagyl and Tequin. There is no apparent setback because of this.

8-28-02-follow-up with ID nurse prac. In ____Clinic-pt. states driving with permission of surgeon. No drainage from abd. wound area. Abd. wound skin graft doing well. Very small area of possible eschar on the right lower corner. No active drainage. Right thigh skin graft-healing well and without drainage. Continue Vanco. for 1 more week.

9-6-02-medical clinic visit with Dr. _____ and PA-states permission from Dr. _____ to work 3-4 hours a day. No drainage. Discontinued Vanco. And PICC line. Started on Minocycline BID for 2 weeks. To follow-up in the Clinic in 2 weeks.

_____ HealthCare-Aug. 4,2002-Oct. 2, 2002. Discharge note on Oct. 3,2002 states all wounds well-healed.

There were at least 5 follow-up visits with Dr. _____. His note on 12-17-02 states, "graft taken, abd. OK."