
Pin Site Care

Pins of all sizes are used frequently in orthopedics. The pins may be part of an external fixator or may be one that stands alone. When the pins are buried below the level of the skin or under a cast, no care is necessary. Often though, these pins penetrate both the skin and the bone with a portion of the pin extending up and out of the skin.

It is very common for these pins to have a small to moderate amount of clear-yellow (serous fluid) drainage from them. This does not mean that they are infected, but rather is completely normal. Since the pins make a communication between the bacteria that live on the skin and the bone that they are drilled into, they are a risk, although the risk of becoming infected is very small. The care of these pins can significantly decrease this infection risk.

The reason that the pins drain the serous fluid is due to the skin moving adjacent to the pin insertion and therefore rubbing on the pin. The irritation that ensues causes the drainage. We can decrease this motion by wrapping the pin with gauze to a point that the gauze is wedged between the external fixator bar and the skin. Thereby splinting the skin and decreasing the motion between the skin and the pin. This can also be accomplished with a color specific clip that attaches to the pin and a small piece of foam. Usually this is enough to manage the drainage to an acceptable amount to prevent infection.

If the drainage increases, then we will add "pin cleaning" to the regimen. Pin cleaning consists of cleaning the base of the pin (where it is inserted into the skin) with sterile cotton swabs and half strength hydrogen peroxide solution. Mixing hydrogen peroxide with sterile water in equal amounts (e.g. half cup hydrogen peroxide and half cup sterile water) creates the solution. Then, dipping the swab into the solution and gently rubbing it around the base of the pin site, cleaning the base of the pin and removing any scabs that have formed between the pin and the skin.

It is beneficial to remove the scabs because the scabs have a tendency to trap infection inside rather than letting it drain out. When trapped inside, the infection will travel down to the bone and infect the bone, potentially causing an osteomyelitis (infection of the bone). Do not start this treatment without contacting my office and discussing the concerns of your pin site with us. The need for antibiotics is rare but on occasion, we may order them.