

INTRODUCING HYDROCOLLOID WOUND DRESSING ENERGY DISRUPTING HUMAN TISSUE METABOLISM

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ABSTRACT

The development in 2016 of a novel Potassium Ferricyanide of formula ($K_3[Fe(CN)_6]$) based tabletop microscopy method enabled for the recording of electromagnetic energy emissions from plants and animal tissue. The microscopy method was subsequently validated and used to document inter-tissue energy exchanges of both, human blood, and catalase proper with a hair follicle. As of recent *in vitro* research using hair follicles as sentinels support expanding an endogenous irradiation theory as disease causing mechanism introduced in 1956 and revisited in 2016 to now also include non-biological exogenous irradiation emitted by hydrocolloid based wound dressings (WD). Videos and still images are presented validating the findings of energy emitted by a small fragment of a hydrocolloid based WD penetrating a 1mm glass slide and unexpectedly delaying the evaporation time of a Potassium Ferricyanide solution surrounding a freshly plucked human hair follicle. Absorption of Incoming electromagnetic radiation is a property of ($K_3[Fe(CN)_6]$). The introduction of energy from an exogenous non-biological material, namely a hydrocolloid wound dressing fragment justifies inclusion in future research protocols.

Keywords: Hydrocolloid Dressing, Exogenous Energy, Hair Follicle, Potassium Ferricyanide, Human Miniorgan Metabolism, Wound Healing, Cancer Research

DEFINITION OF TERMS

EMFs: Electromagnetic Fields

K3Fe: Acronym for the Potassium Ferricyanide formula $K_3[Fe(CN)_6]$.

SDW: Sandwich. When material is trapped between two identical glass slides.

WD: Wound Dressing.

1. INTRODUCTION

The introduction in 2016 of a novel Potassium Ferricyanide ($K_3[Fe(CN)_6]$) based tabletop microscopy method enabled for the recording of electromagnetic energy emissions from plants and animal tissue [Scherlag et al. \(2016\)](#). This microscopy method was subsequently validated [Embi \(2022\)](#) and used as tool in introducing biological inter-tissue energy exchanges from both, human blood, and the ubiquitous enzyme catalase with a hair follicle [Embi \(2020\)](#), [Embi \(2018\)](#). As of recent *in vitro* research using hair follicles as sentinels support expanding the hypothesized intracellular endogenous irradiation theories in cancer genesis introduced in 1956 and 2016 [Harman \(1956\)](#), [Embi \(2016\)](#) to include non-biological xogenous material irradiation from hydrocolloid based wound dressings (WD).

Videos and still images are presented validating the findings of energy emitted by a small fragment of a hydrocolloid based WD penetrating a 1mm glass slide and unexpectedly delaying the evaporation time of a Potassium Ferricyanide crystals of formula $K_3[Fe(CN)_6]$ in solution surrounding a freshly plucked human hair follicle. A most interesting property of $K_3[Fe(CN)_6]$ is the total absorption of incoming electromagnetic radiation (EMRs) [Figgis et al. \(1969\)](#), [Baranov et al. \(2015\)](#); therefore, the presence of an incoming EMR when encountering $K_3[Fe(CN)_6]$ in solution causes a delay in the ongoing crystals formation. The changes attributed to incoming radiation in a human hair follicle placed within the energy cone a WD fragment penetrating a 1 mm glass slide is at the core of this presentation. The addition of energy from an exogenous non-biological material, namely a hydrocolloid wound dressing fragment justifies inclusion in future research protocols.

2. MATERIALS AND METHODS

2.1. MATERIALS

Potassium Ferricyanide powder of formula $K_3[Fe(CN)_6]$.

Two stacked glass slides 25x75x1mm

Bottled water drops

Freshly tweezers plucked human hairs from author.

DuoDerm 1.75 in. x 1.5 in. / 4.4cm x 3.8cm- Hydrocolloid Wound Dressing cut fragment x4 mm width x 15 mm length. Manufactured by: ConvaTec Inc. NC

Video-Microscope

MacBook Air Apple computer equipped with photo application program

2.2. METHODS

The hydrocolloid wound dressing (WD) material was cut into small fragments with a width of approximately 4 mm and 15 mm in length. The adhesive strip was taped onto a clean 25x75x1mm glass slide. A second like slide placed covering the WD strip, thus creating a sandwich (SDW). On the top slide surface of the SDW crystals were placed and diluted by two to three drops of water, a freshly plucked scalp human hair was aligned with the shadow of the WD. Please refer to [\(Figure 1\)](#), and images A, B and C below.

Figure 1

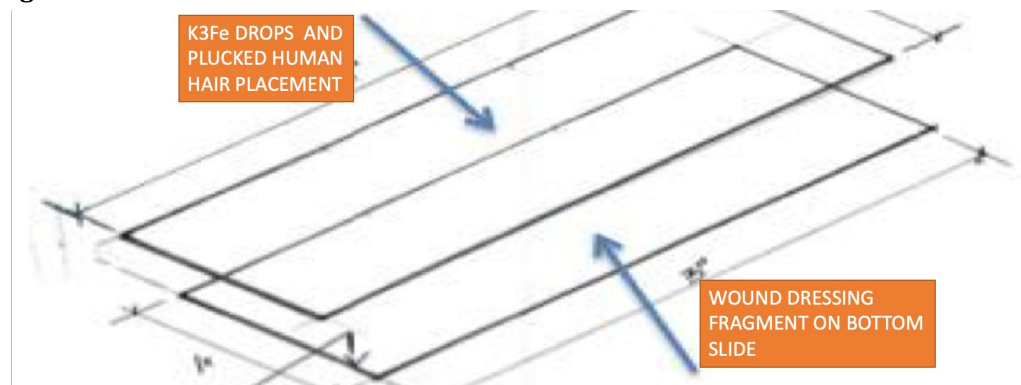


Figure 1 Slide Assembly for Experiments

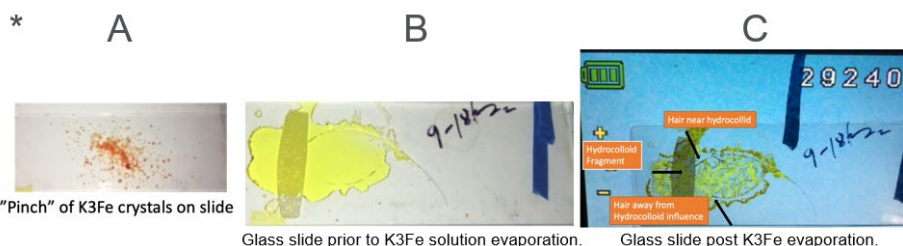
Hair immersed in K3Fe solution at 1 mm vertical distance from wound dressing

A narrow strip of wound dressing (WD) was adhered to a single clean slide (size 25 x 75 x 1mm), at this time a second slide was placed on top; thus, creating a sandwich (SDW). On the top slide of the SDW two drops of $K_3 [Fe (CN)_6]$ were placed, a previously freshly plucked human hair was situated and maneuvered via toothpick to be near the WD right shadow's edge. The diluted $K_3 [Fe (CN)_6]$ crystals and hair are now at a vertical distance of 1 mm from the WD. The two-slide preparation was allowed to evaporate, still images and video-recordings taken for further analysis.

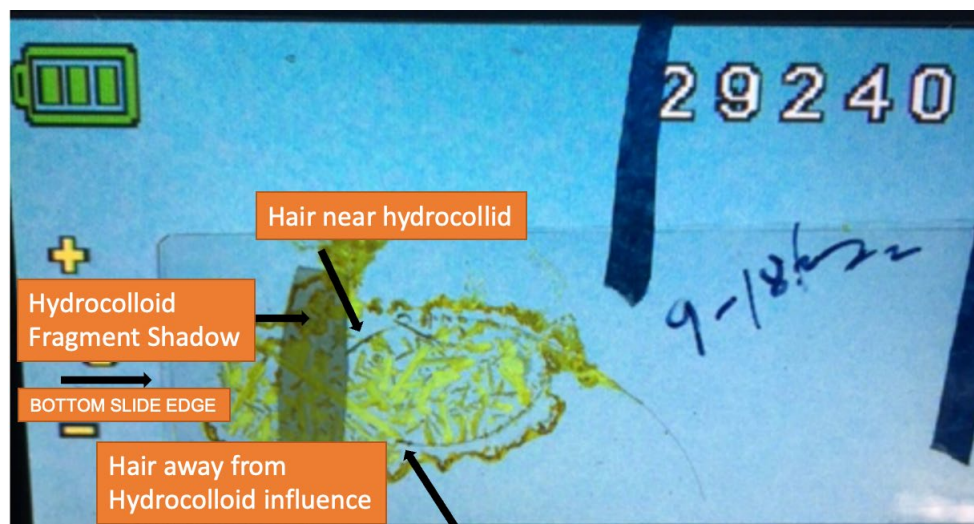
Additional Details

For simplicity in some areas in the text the acronym K3Fe will substitute the Potassium Ferricyanide formula $K_3[Fe(CN)_6]$

On top slide surface dilute a "pinch" * of $K_3[Fe(CN)_6]$ crystals (A below) in two to three drops of water. Mix crystals with toothpick until in solution, then place on slide a previously freshly tweezer plucked scalp human hair. Gently maneuver hair with toothpick until optimal position (B below). Optimal defined as hair follicle near hydrocolloid shadow now at 1mm vertical distance. Place B in video-microscope, observe and record changes until C (K3Fe) has totally evaporated.



TO APPRECIATE DETAILS



AMPLIFIED EXHIBIT I POST K3FE EVAPORATION (C ABOVE)

ADDITIONAL NOTE:

The diluted drops on a slide must be plumb level, this to avoid unwanted liquid shifting on slide. In the experiments herein presented, notice a left sided placement of the WD; this to compensate for a slight surface inclination.

3. RESULTS

A total of four *in vitro* experiments were done, all detected a disruption of human hairs follicles electromagnetic radiation as interpreted from the disappearance of semicircular concentric K3Fe precipitated crystals circumventing the follicle. Example of a “normal” image is seen in (Figure 2) below.

CONTROL IMAGE

Figure 2

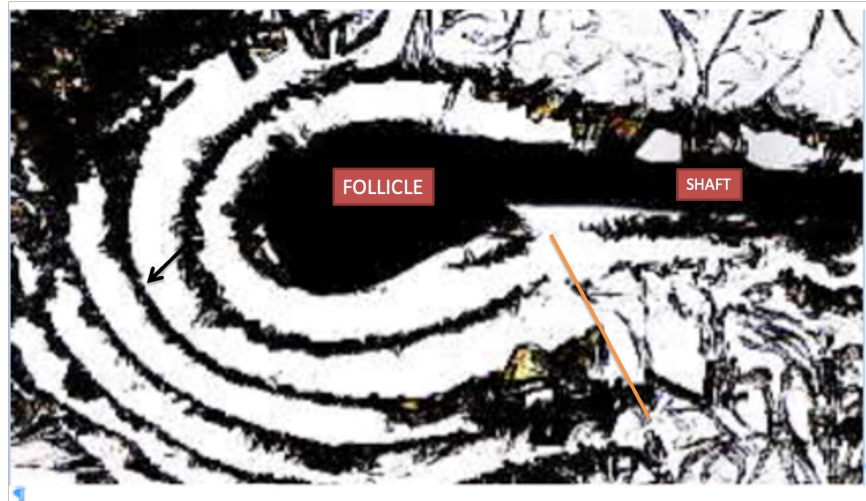


Figure 2 Control Human Hair in Liquid K3Fe After Evaporation, Showing:
Black Arrow: Concentric Undisturbed Crystals Around Follicle Indicating Normal Emfs Waves.
Orange Line: Indicating Anatomical end Point Where Follicle's Circumventing Emfs are Present.

EXHIBIT I

Figure 3

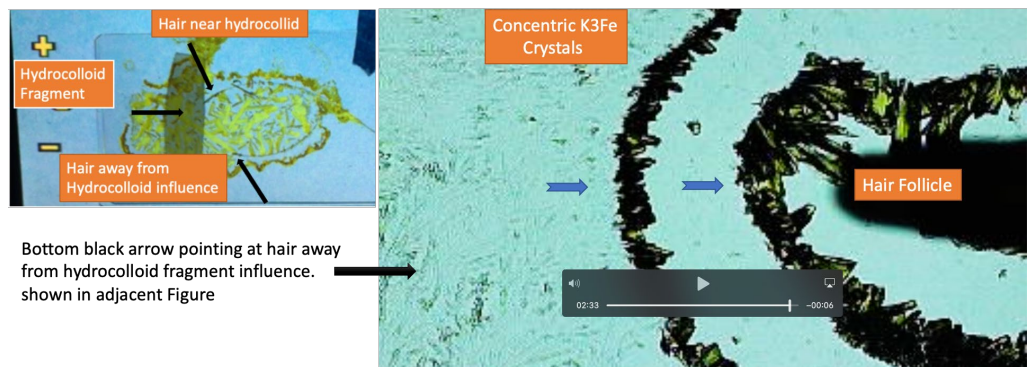


Figure 3 Human Hair Away from the Hydrocolloid Influence at 1 Mm Distance. Blue Arrows: This Time the Semicircular Concentric EMFs are Documented Absorbed by the K3Fe. Compare with Figure 2 Above.

HAIR FOLLICLE NEAR HYDROCOLLOID INFLUENCE SHOWING ABSENCE OF EMF EMISSIONS.

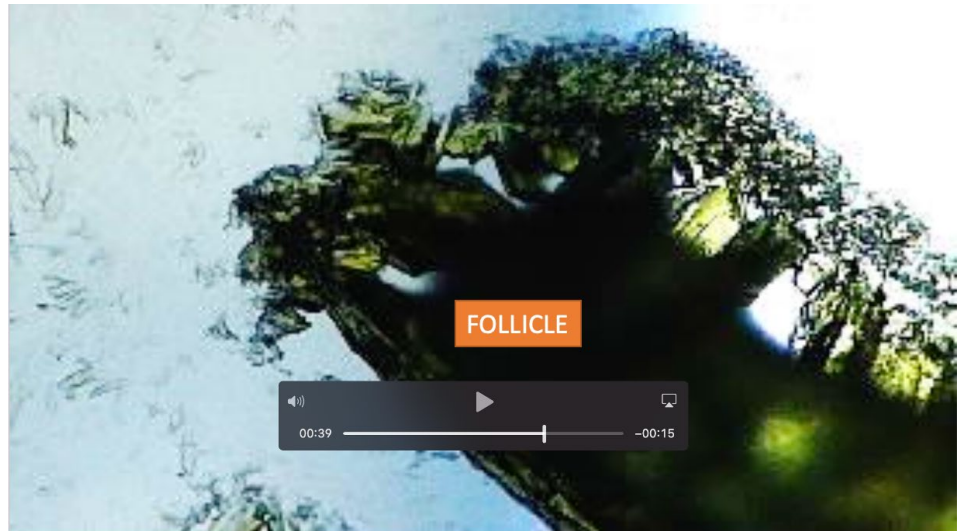
Figure 4



Figure 4 Hair Follicle in K3Fe after Evaporation Showing Absence of Semicircular K3Fe Crystals Surrounding Follicle (See [Figure 2](#), [Figure 3](#)). The Absence is Hypothesized to be from Unexplained to be Named Energy Penetrating the 1 mm Glass Slide from the Wound Dressing Strip. Video frame at 00:04 seconds.

SAME IMAGE AS [Figure 4](#) SHOWING HAIR FOLLICLE

Figure 5



<https://youtu.be/QghUriyCUH4>

Figure 5 Image Showing Effect of Hydrocolloid Energy on Hair Follicle in K3Fe. For Details, please



link to: <https://youtu.be/QghUriyCUH4>Or Scan QR Code

Video frame at 00:39 seconds.

Figure 6

Figure 6 Another Experiment Showing Effect of a Sandwiched Hydrocolloid Dressing Strip on Hair Follicle SSP K₃Fe Electromagnetic Emissions. Blue Arrow: Pointing at Aberrant Potassium Ferricyanide Crystals. Black Arrow: Left Upper Corner Pointing at Shadow's Edge of Sandwiched Duoderm Strip.

4. DISCUSSION

In the text, [Figure 2](#), [Figure 3](#) when compared with [Figure 4](#), [Figure 5](#), [Figure 6](#) show the stark contrast between a “normal” hair follicle’s energy emission and when the follicle is subjected to a “yet to be named” energy source emitted by a hydrocolloid dressing fragment. Based on previously published results using a novel tabletop microscopy published in 2016 relying on a property of K₃[Fe(CN)₆] of total absorption of incoming energy; control images have documented the human hair follicle as a biological entity emitting energy ([Figure 2](#)). This emission was described as consequence of the “Inherent electromagnetic forces emanating from human hairs”; subsequent research using the technique identified the hair follicle as sentinel for drugs evaluation [Embi \(2020\)](#), [Embi \(2020\)](#) to the transdermal teleportation of hair follicles energy, up to the interesting documentation of energy emitted by dead tissue [Embi \(2022\)](#) amongst others.

The hair follicle has been classified as a miniorgan [Schneider et al. \(2009\)](#) having its own intrinsic metabolism, cell divisions and an energy emitter. In this manuscript an unknown (yet to be named) energy source from a hydrocolloid wound dressing is shown to cause noticeable changes in hair follicles energy emissions. Of interest, is that only when the hair follicle is placed very near or on a wound dressing strip shadow placed at 1 mm distance is that the energy emissions are compromised ([Exhibit I](#)).

5. QUESTION ARISES:

Q: What are the implications of a hydrocolloid wound dressing energy being transferred onto human tissue?

A: Unknown at present. In this manuscript energy emitted by a small fragment of a commercially available hydrocolloid dressing (DuoDerm) is shown to inhibit a human hair follicle emissions of electromagnetic waves as recorded using a solution

of Potassium Ferricyanide (K₃Fe). The inhibition was rationalized by observing a marked decrease in K₃Fe crystals surrounding the follicle. As aforementioned K₃Fe absorbs incoming electromagnetic radiation.

Further research is warranted.

CONFLICT OF INTERESTS

None.

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