HONEY: CLINICAL APPLICATIONS AND SCOPE AS AN ALTERNATE ANTIBACTERIAL THERAPY IN MULTI-RESISTANT OCULAR BACTERIAL INFECTIONS ESPECIALLY INVOLVING MRSA
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Honey in the Other Holy and Pious Books

*Holy Quran Pak –

* "The Veda"

*Both the old and new testaments of "the Bible"
And your Lord inspired the bee, saying: ‘Take you habitations in the mountains and in the trees and in what they erect. Then, eat of all fruits, and follow the ways of your Lord made easy (for you).’ There comes forth from their bellies, a drink of varying color wherein is healing for men. Verily, in this is indeed a sign for people who think.” [Quran; 16: 68-69]
The anti-bacterial, anti-inflammatory, anti-oxidant and wound healing properties of Honey

- Low pH, High Osmolarity, H2O2 Production → Anti-inflammatory & Anti-Oxidant Activities

- Wound Healing Activity

- Anti-bacterial Activity → Phenolic acids, Flavonoids Reduced Prostaglandins Production
ULCERS_ treated successfully with honey

• Foot ulcers in lepers
Miracle of HONEY => MAGIC!

- Healing
- Oedema
- Antiseptic
- CurE
- Dentistry
Honey in common infections

- Anthrax
- Diphtheria
- Diarrhea,
- Pneumonia
- Meningitis
- Tuberculosis
- Septicemia,
- Typhoid
- Septicemia,
- wound infections
- Dysentery
- Cholera
Treatment by Honey: many Diseases, Wounds & Ulcers - Many Publications

- Wound infections,
- burns,
- psoriasis,
- gastrointestinal disorders,
- arthritis,
- eczema,
- sore throat,
- dental carries,
- stomach aches,
- flu like symptoms and
- corneal ulcers
Bacterial species sensitive to Honey

- *Pseudomonas aeruginosa*
- *salmonella typhi*
- *Shigella species*
- *Staphylococcus aureus*
- *Streptococcus faecalis*
- *streptococcus pneumoniae*
- *Streptococcus pyogenes*
- *Vibrio cholerae*
Honey’s Clinical Applications/Miracles in Various fields Observed

- Ophthalmology,
- Dentistry,
- Surgery,
- Plastic Surgery,
- Paediatrics,
- Gynaecology,
- Dermatology
- Gastroenterology.
Drug resistance in Eye Inf. Emerging?

Drug resistance now a global problem to physicians and surgeons.
Bacteria cause various pathologies in the eye as -

Conjunctivitis
Keratitis
Keratoconjunctivitis
Blepharitis
Hordeolum
Scleritis
Chalazion
Dacryocystitis
Uveitis,
Orbital cellulitis
Bacterial corneal ulcers,
Endophthalmitis
Panophthalmitis etc
EMERGENCE OF DRUG RESISTANCE AMONG EYE INFECTANTS (MRSA)

• A large number of eye infections may pose a potential eye blinding threat particularly when not respond to common antibiotics due to emergence of resistance.
What is MRSA?

• *S. aureus* that is resistant to the synthetic penicillins (methicillin, oxacillin, nafcillin, cloxacillin, dicloxacillin and amoxicillin [+] clavulanate and the cephalosporins) is known as **MRSA**.

• Methicillin — the first semi-synthetic penicillin — rapidly became the "gold standard" for treating penicillin-resistant *S. aureus* in 1960.
Antibacterial Efficacy of Topical Honey in Dry Eye Patients: A clinico-Microbiological study
COMPARATIVE EFFECT OF TOPICAL USE OF MANUKA HONEY (40%) ON CONJUNCTIVAL BACTERIAL LOAD AT VARIOUS PERIOD OF TIME

THESES Guidance from Lab. of Prof. Shamim Ahmad—since 1989

COCLUSION

Based on available information & our work, we can see potential prospects and scope of Honey as an alternate antibacterial option in future particularly for the treatment of non-responding life threatening multi-resistant pathogens especially superbug MRSA strains & probably conjunctivitis, keratitis, blephritis, orbital cellulitis, and dacryosystitis.