

STUDY ON THE EFFECTIVENESS OF MINIMUM DOSE OF HOMOEOPATHIC MEDICINES IN THE MANAGEMENT OF MOLLUSCUM CONTAGIOSUM

ACKNOWLEDGEMENT

I would like to express my sincere thanks to my respected teacher and guide, Dr.K.X.Joseph head of the department Govt. Homoeopathic Medical College, Thiruvananthapuram for his valuable guidance and constant encouragement given to me throughout my post-graduation course and necessary directions in the preparation of this thesis.

I sincerely thank Mr.P.I.Narayanan, MSc.D.H.S, Retired Associate Professor, Department of Biostatistics, Medical College, Kozhikode for conducting the analysis of this work.

I extend my gratitude to my colleagues and to the staff of various departments of this college for their sincere co-operation.

Finally I owe my unlimited indebtedness to all my patients and their parents involved in this study for their co-operation, without which this study would not have been possible.

Dr.Ameer KhalidC.P.

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<i>Introduction</i>	

Molluscum contagiosum is generally a benign disease characterized by pearly, flesh-colored, umbilicated skin lesions 2 to 5 mm in diameter. The virus is transmitted from person to person. The infection can be transmitted by close contact, including sexual intercourse. Swimming pools are a common vector for transmission. Lesions are often multiple and once established in an individual may spread by auto inoculation. Lesions can be found anywhere on the body except the palms and soles and may be associated with an eczematous rash. The abdomen, the buttocks, the genitals, the face, and arms are common sites. There are rarely lesions inside the mouth. Atopy and compromise of skin integrity can increase the risk of infection. In most cases the disease is self-limiting with in 6-9 months and has no systemic complications. On an average, lesions may be present for 2 years before spontaneous resolution occurs.

In Organon of Medicine Dr. Samuel Hahnemann describes the necessity of minimum dose. In § 159 of Organon of Medicine describes the minimum dose as the smaller the dose of homoeopathic remedy is, so much the slighter and shorter is the apparent increase of the disease during the first hours. The minimum dose is a dose so small that it is not capable of producing symptoms when used therapeutically. Homoeopathy requires that the therapeutic dose must be capable only of producing a slight temporary aggravation or intensification of already existing symptoms, never of producing new symptoms.

As the molluscum contagiosum is viral disease there is no specific treatment for this in any of the other system of medicine. This is an attempt to conduct a clinical study on molluscum contagiosum and to evaluate the effectiveness of minimum dose of homoeopathic medicines in the management of this condition. The scientific study is done with statistical analysis based on chi-square test.

AIM AND OBJECTIVE OF THE STUDY

To study the efficacy of Homoeopathic Medicines in minimum dose the management of Molluscum contagiosum.

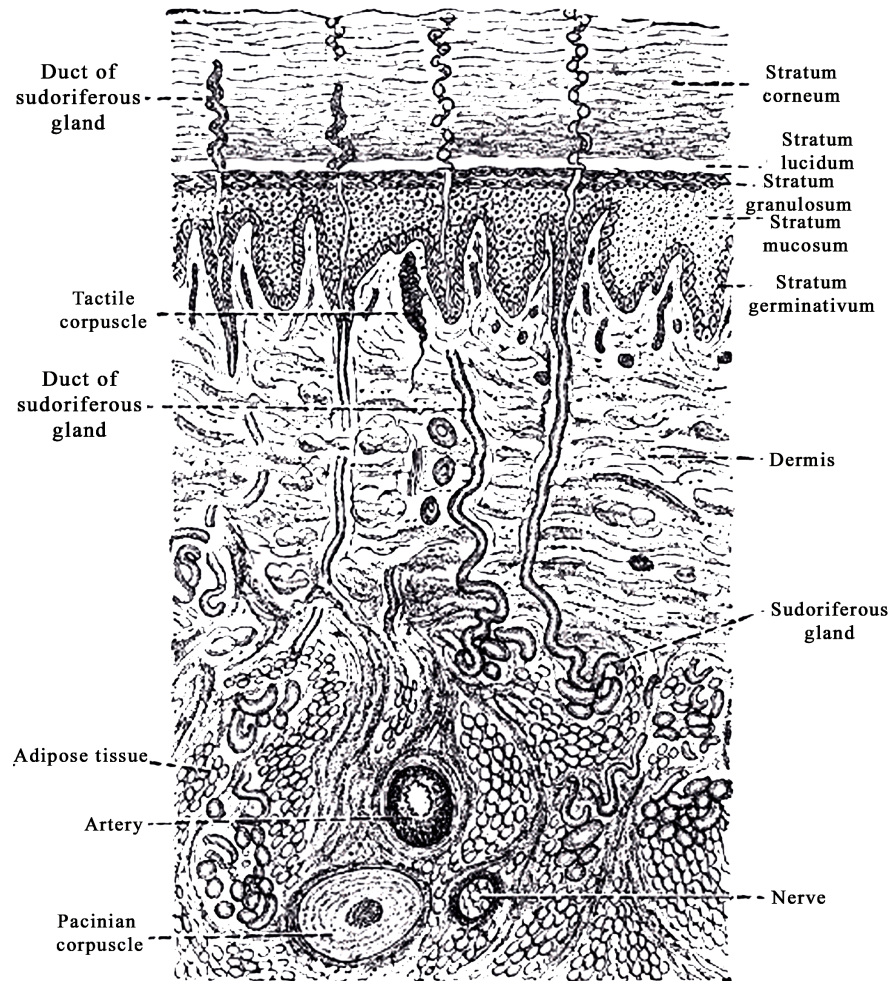
Review of Literature

ANATOMY

Skin

The skin is considered the largest organ of the body and has many different functions.

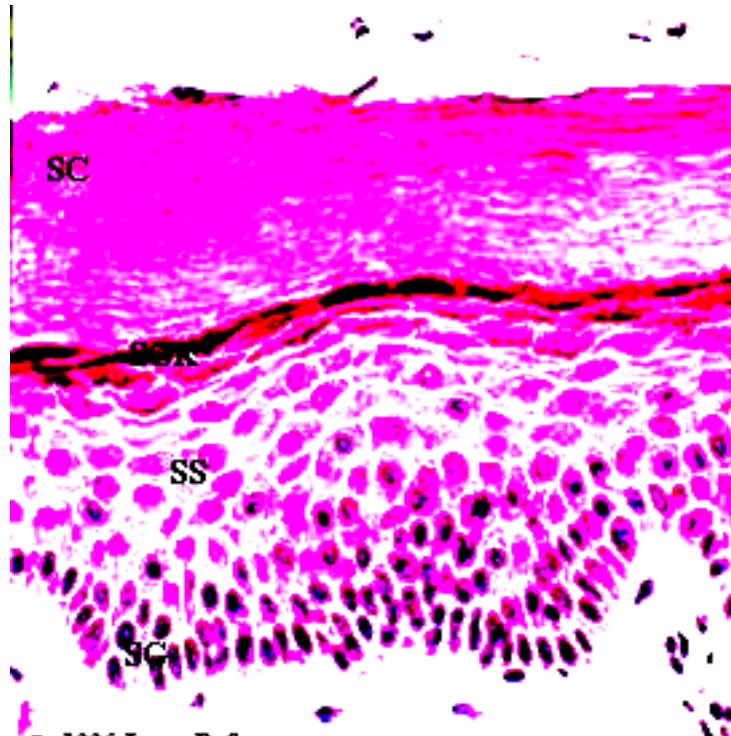
The skin functions in thermo regulation, protection, metabolic functions and sensation.



Diagrammatic sectional view of the skin

The skin is divided into two main regions, the epidermis, and the dermis, each providing a distinct role in the overall function of the skin. The dermis is attached to an underlying hypodermis, also called subcutaneous connective tissue, which stores adipose tissue and is recognized as the superficial fascia of gross anatomy.

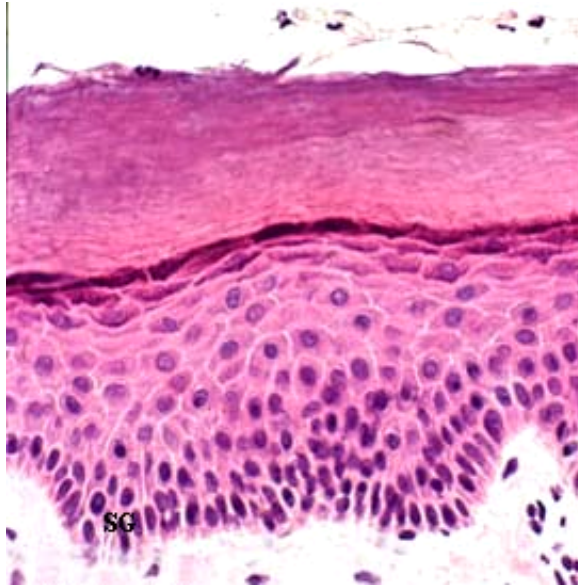
II. Epidermis



Diagrammatic sectional view of epidermis

The epidermis is the most superficial layer of the skin and provides the first barrier of protection from the invasion of foreign substances into the body. The principal cell of the epidermis is called a keratinocyte. The epidermis is subdivided into five layers or strata, the stratum germinativum , the stratum spinosum, the stratum granulosum, the stratum lucidum and the stratum corneum in which a keratinocyte gradually migrates to the surface and is sloughed off in a process called desquamation.

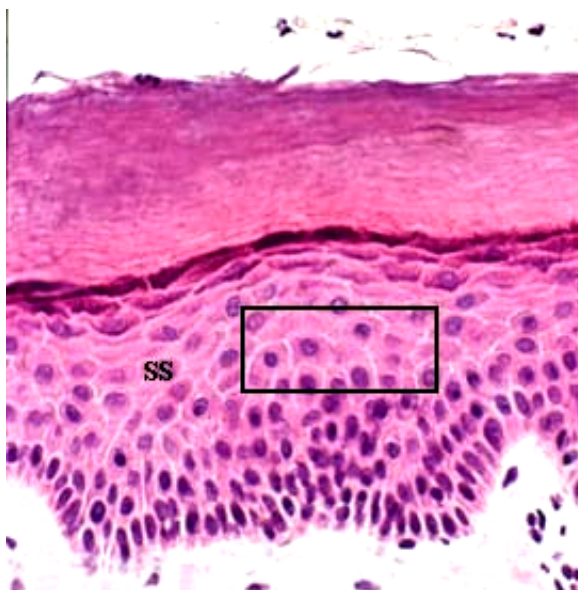
1. Stratum germinativum

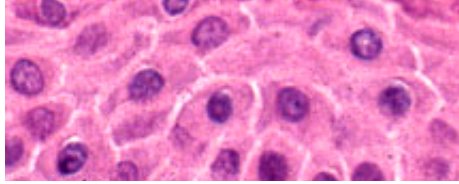


Stratum Germinatum

The stratum germinatum provides the germinal cells necessary for the regeneration of the layers of the epidermis. These germinal cells are separated from the dermis by a thin layer of basement membrane. After a mitotic division a newly formed cell will undergo a progressive maturation called keratinization as its migrates to the surface.

2. Stratum spinosum

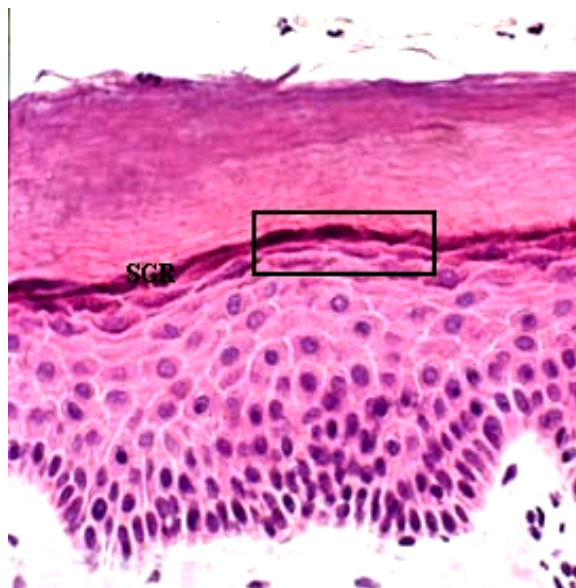




stratum spinosum

The cells that divide in the stratum germinativum soon begin to accumulate many desmosomes on their outer surface which provide the characteristic “prickles” (seen on the close-up view) of the stratum (**SS**), which is often called the prickle-cell layer.

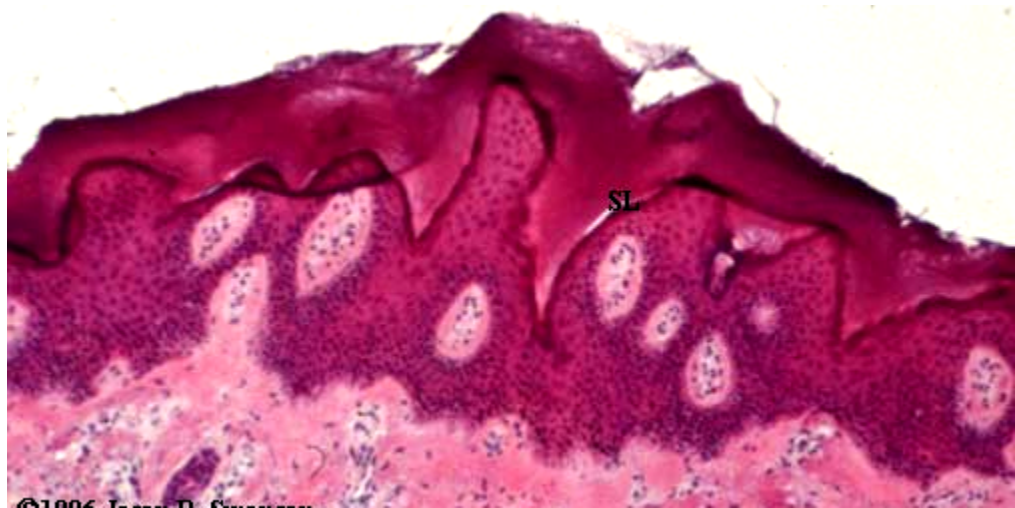
3. Stratum granulosum



Stratum Granulosum

The progressive maturation of a keratinocyte is characterized by the accumulation of keratin, called keratinization. The cells of the stratum granulosum (**SGR**) accumulate dense basophilic keratohyalin granules (seen on the close-up view). These granules contain lipids, which along with the desmosomal connections, help to form a waterproof barrier that functions to prevent fluid loss from the body.

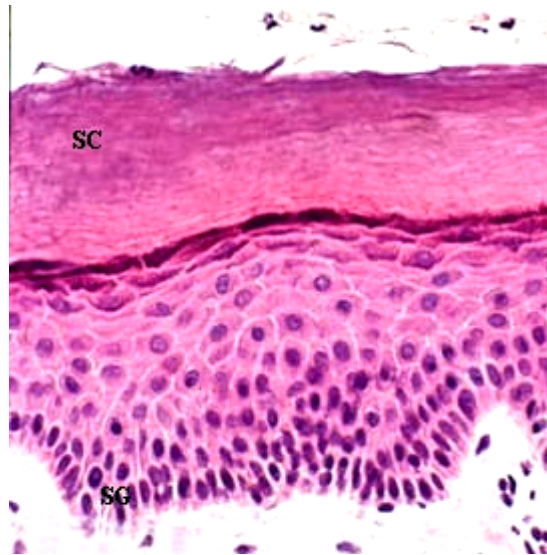
4. Stratum lucidum



Stratum Lucidum

Epidermis varies in thickness throughout the body depending mainly on frictional forces and is thickest on the palms of the hands and soles of the feet. The stratum lucidum is normally only well seen in thick epidermis and represents a transition from the stratum granulosum to the stratum corneum.

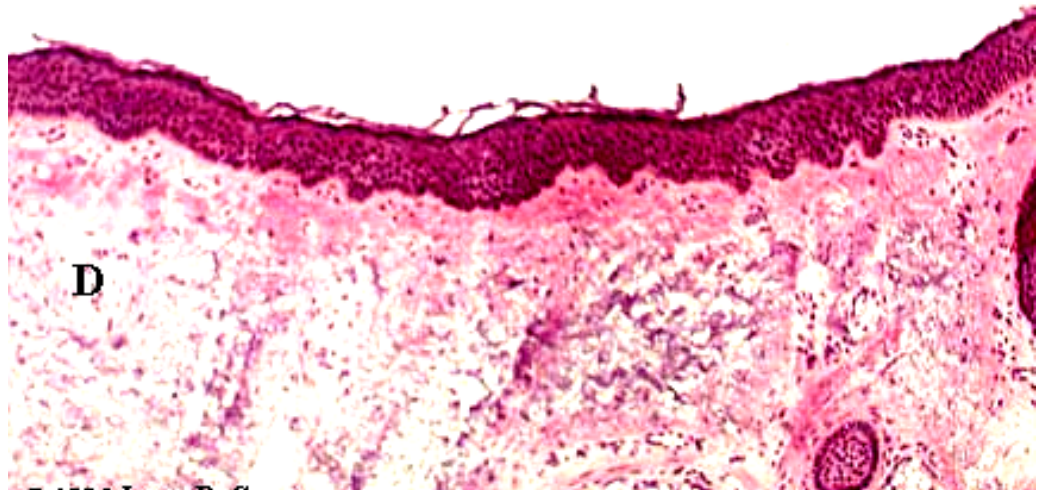
5. Stratum corneum



stratum corneum

As a cell accumulates keratinohyalin granules, it is thought that rupture of lysosomal membranes release lysosomal enzymes that eventually cause cell death. The dead and dying cells filled with mature keratin form the stratum corneum (**SC**). The deeper cells of the stratum corneum retain their desmosomal junctions, but as they are pushed to the surface by newly forming cells of the stratum germinativum (**SG**), the dead cells gradually break apart and are lost, a process called desquamation.

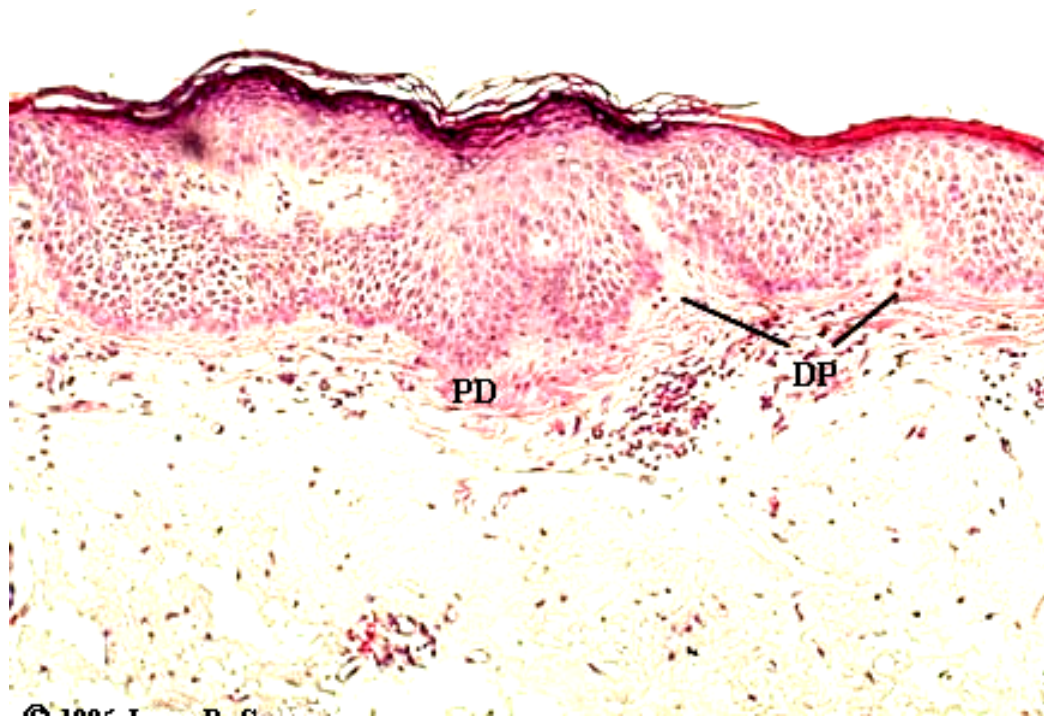
III. Dermis



Dermis

The dermis assumes the important functions of thermo regulation and supports the vascular network to supply the avascular epidermis with nutrients. The dermis is typically subdivided into two zones, a papillary dermis and a reticular layer. The dermis contains mostly fibroblasts which are responsible for secreting collagen, elastin and ground substance that give the support and elasticity of the skin. Also present are immune cells that are involved in defense against foreign invaders passing through the epidermis.

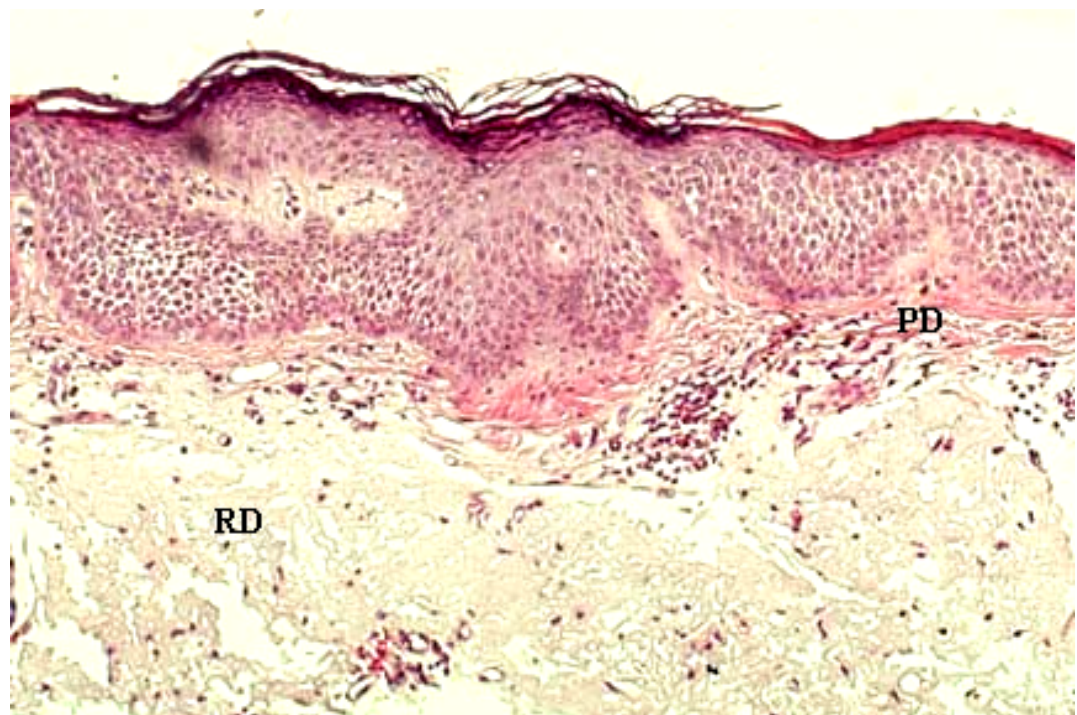
1. Papillary dermis



Papillary Dermis

The papillary dermis (**PD**) contains vascular networks that have two important functions. The first being to support the avascular epidermis with vital nutrients and secondly to provide a network for thermoregulation. The vasculature is organized so that by increasing or decreasing blood flow, heat can either be conserved or dissipated. The vasculature interdigitates in areas called dermal papillae (**DP**). The papillary dermis also contains the free sensory nerve endings and structures called Meissner's corpuscles in highly sensitive areas.

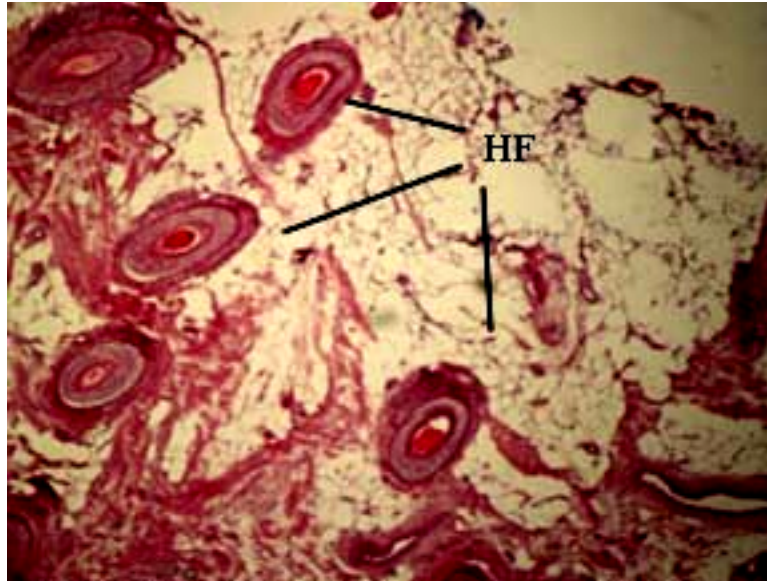
2. Reticular dermis



Reticular dermis

The reticular layer of the dermis (**RD**) consists of dense irregular connective tissue, which differs from the papillary layer (**PD**), which is made up of mainly loose connective tissue (note the difference in the number of cells). The reticular layer of the dermis is important in giving the skin its overall strength and elasticity, as well as housing other important epithelial derived structures such as glands and hair follicles.

IV. Skin Appendages



Appendages of skin

The skin contains a variety of appendages, mainly hair follicles (**HF**), sweat glands, and sebaceous glands (**SG**), which are all embryologically epidermal in origin.

Development.—The epidermis and its appendages, consisting of the hairs, nails, sebaceous and sweat glands, are developed from the ectoderm, while the corium or true skin is of mesodermal origin. About the fifth week the epidermis consists of two layers of cells, the deeper one corresponding to the rete mucosum. The subcutaneous fat appears about the fourth month, and the papillæ of the true skin about the sixth. A considerable desquamation of epidermis takes place during fetal life, and this desquamated epidermis, mixed with sebaceous secretion, constitutes the vernix caseosa, with which the skin is smeared during the last three months of fetal life. The nails are formed at the third month, and begin to project from the epidermis about the sixth. The hairs appear between the third and fourth months in the form of solid downgrowths of the deeper layer of the epidermis, the growing extremities of which become inverted by papillary projections from the corium. The central cells of the solid downgrowths undergo alteration to form the hair, while the peripheral cells are

retained to form the lining cells of the hair-follicle. About the fifth month the fetal hairs (lanugo) appear, first on the head and then on the other parts; they drop off after birth, and give place to the permanent hairs. The cellular structures of the sudoriferous and sebaceous glands are formed from the ectoderm, while the connective tissue and bloodvessels are derived from the mesoderm. All the sweat-glands are fully formed at birth; they begin to develop as early as the fourth month.

The arteries supplying the skin form a net-work in the subcutaneous tissue, and from this net-work branches are given off to supply the sudoriferous glands, the hair follicles, and the fat. Other branches unite in a plexus immediately beneath the corium; from this plexus, fine capillary vessels pass into the papillæ, forming, in the smaller ones, a single capillary loop, but in the larger, a more or less convoluted vessel. The lymphatic vessels of the skin form two net-works, superficial and deep, which communicate with each other and with those of the subcutaneous tissue by oblique branches.

The nerves of the skin terminate partly in the epidermis and partly in the corium;

PHYSIOLOGY OF SKIN

Functions of skin

Skin participates in many functions; major functions in which skin participates include, (1) temperature regulation (2) sense perception (3) protective function (4)

Preservation of a balanced internal environment

I. Temperature balance

The body, for the purpose of thermoregulation, is divided into two parts, (i) the shell and (ii) the core. Skin and subcutaneous tissue together (often simply called, the skin) constitute the shell. All other tissues are core. The shell therefore wraps the core.

Our body produces large quantity of heat by metabolism, liver is the chief organ where this heat is produced.

In hot environment, two things happen: (i) cutaneous vasodilatation occurs and heat generated by the core (eg. by the liver) is conveyed via the blood and this heat arrives the skin there the heat is dissipated to the environment thereby body (ie, the core) is cooled, (ii) The sweat glands of the skin produces sweat and sweat is evaporated and when evaporation takes away the latent heat. So skin is cooled and the blood from the core reaches the skin and is cooled and is returned to the core.

In cold environment, cutaneous vasoconstriction develops; core blood (which is warmer) cannot reach the skin. This way internal heat is preserved.

II. Sense perception

The skin contains receptors for such senses like touch, temperature etc (the cutaneous senses). Impulses are received by these receptors. From these receptors afferent nerve fibers arise and they, ultimately end in the proper area of brain. thus cutaneous senses are perceived.

III. Protective functions

It goes without saying that skin covers all the structures of the body and thus protects them. Special things are:

(i) Ultra violet (UV) rays of the sun are absorbed by the melanin as well as stratum corneum. UV exposure can cause UV ray injury which includes skin cancer.

(ii) The skin is a barrier, against many harmful agents like bacteria or chemicals. The skin harbors many bacteria which are beneficial to the body as they destroy many harmful bacteria of the environment.

IV. Preservation of a balanced internal environment

It prevents loss of water, electrolytes and macromolecules₂

V. Other functions

It functions as shock absorber, Synthesizes vitamin D, lubricates and water proofing the body and synthesizes testo sterone from inactive precursors and testosterone conversion to other androgenic steroids₂

DEFINITION:

Molluscum contagiosum is generally a benign disease characterised by pearly, flesh coloured, umbilicated skin lesion 2 to 5 mm in diameter, caused by the molluscum contagiosum virus usually causing one or more small lesions/bumps.

BACKGROUND

Descriptions of molluscum contagiosum have been in the medical literature since 1817. Bateman first described the disease in 1817. In 1905, the viral nature of molluscum contagiosum was discovered by Juliusburg. It is a cutaneous infection caused by a large DNA poxvirus that affects both children and adults. Transmission has been reported by direct skin contact and has occurred in wrestlers, patients of a surgeon with a hand lesion, and children sharing baths, towels, gymnasium equipment, and benches. Autoinoculation also occurs as evidenced by linear arrays of lesions on infected individuals. The term molluscum was used to describe the pedunculated appearance, and the term contagiosum was used to connote that the disease is transmissible. Interestingly, the idea of an infectious etiology arose after successful transmission occurred in humans who were inoculated with the materials contained within the lesions. Goodpasture first noted the microscopic similarities that exist between molluscum contagiosum and vaccinia (ie, smallpox).

INCIDENCE AND PREVALENCE (EPIDEMIOLOGY)

Molluscum contagiosum has an incidence of up to 4.5% in some population groups. During a regional outbreak in East Africa, it was estimated that 17% of a village's general population and up to 52% of children older than 2 years developed lesions. Poverty, overcrowding, poor hygiene, use of public pools, and sharing of clothes and towels by infected persons have all been implicated in the spread of the virus. The infection is transmitted by close physical contact, fomites, and autoinoculation (whereby the patient manually spreads the infection from one location to another, by touching or scratching). There appears to be a greater incidence of

molluscum contagiosum in tropical areas, although fairly high incidences have been documented in northern European countries as well. An Australian study found anti-MCV antibodies in 39% of adults older than 50 years, demonstrating exposure to be very common. Molluscum contagiosum is a common infection throughout the United States. It accounts for approximately 1% of all diagnoses of skin disorders. The exact incidence in the United States is unknown. Higher incidence in children with eczema as well as in immunocompromised individuals has been documented. Molluscum contagiosum is a benign process; therefore, morbidity and mortality are limited. For the most part, morbidity is due to adverse cosmetic results, which usually resolve, without scarring. The lesions can undergo secondary bacterial infection. Morbidity is greater in immunocompromised and immunodeficient patients since they tend to have a greater number of lesions and more widespread infection, resulting in a greater likelihood of super infection. Despite the rather benign, self-limited course, parents of affected children perceive molluscum to be a significant problem. They cite concerns with scarring, pain, itching, painful treatment, and the chance of spread to peers. There is no well-documented predilection for infection among any racial group. In one longitudinal study in the United States, 2-4 times as many cases occurred among whites than among other racial groups. This study took place from 1977-1981, and it is unclear if the noted difference was secondary to the differences in accessibility to medical care or other socioeconomic factors. Studies do not demonstrate any definite difference in incidence between the sexes. Infection with molluscum contagiosum occurs in all age groups, and prevalence seems to be increasing. The greatest incidence is in children younger than 5 years. This is thought to result from casual contact and autoinoculation. Another smaller spike of incidence occurs in young adults, resulting from propagation through sexual contact. Infection in infants is rare, perhaps because of the persistence of maternal antibodies.

Molluscum contagiosum is common in the tropics and subtropics probably because of the increased desquamation associated with hydration. Childhood molluscum contagiosum is common in Papua New Guinea, Fiji, and certain parts of Africa.

Epidemiological studies suggest that transmission may be related to poor hygiene and climatic factors, such as warmth and humidity. Reported data for 1969-1983 by the National Disease and Therapeutic Index Survey, which compiles information about patterns of disease in office-based practices in the continental United States, showed an increase in the number of patient visits for molluscum contagiosum. Molluscum contagiosum is more common in patients who are on steroid therapy or in those who have atopic dermatitis, immunodeficiency, or lymphoproliferative disorders. A molluscum contagiosum infection rate of 8% was seen in one study of 528 HIV-positive patients. The severity of molluscum contagiosum is inversely related to the CD4 T-lymphocyte count. Molluscum contagiosum has been reported in 5.6% of children in kindergarten and in 7.4% of elementary school children. Persons of any race can be affected. Molluscum contagiosum affects both sexes equally. Molluscum contagiosum appears to have a bimodal age distribution. The first is in childhood, when transmission occurs from nonsexual skin contact. The second is in early adulthood (age 15-29 y), when molluscum contagiosum occurs as a sexually transmitted disease. Although molluscum contagiosum can occur in persons of any age, population surveys conducted in Papua New Guinea and Fiji have found that the peak incidence of the disease is among children younger than 5 years, with a prevalence of approximately 25%. Molluscum contagiosum appears to have a bimodal age distribution. The first is in childhood, when transmission occurs from nonsexual skin contact. The second is in early adulthood (age 15-29 y), when molluscum contagiosum occurs as a sexually transmitted disease.

AETIOLOGY

DNA poxvirus, the largest virus known (200 X 300 X 100 nm), causes molluscum contagiosum. The inner and outer membranes of the virion surround a dumbbell-shaped nucleoid. The genome is a linear duplex DNA with an estimated weight of 120-200 megadaltons. Restriction endonuclease analysis of the molluscum contagiosum virus (MCV) reveals 4 viral subtypes named MCV 1, 2, 3, and 4. All subtypes cause

similar clinical symptoms. The most common subtypes, MCV 1 and MCV 2, have genomes of 185 kilobases (kb) and 195 kb, respectively.

MCV encodes an antioxidant protein (MC066L), selenoprotein, which functions as a scavenger of reactive oxygen metabolites and protects cells from UV or peroxide damage. The particular role of this protein is not known because the attempt to grow MCV in vitro has not been successful.

VIRION PROPERTIES

Morphology

Virions consist of an envelope, a surface membrane, a core, and lateral bodies, or a surface membrane, a core, and lateral bodies. During their life cycle, virions produce extracellular particles and produce intracellular particles; can occur in two phenotypes; may be enveloped during their extracellular phase. The infection is initiated by extracellular virions. Virus may be sequestered within inclusion bodies that are not occluded and typically contain one nucleocapsid. Virus capsid is enveloped and virions mature naturally by budding through the membrane of the host cell. Virions are generally brick-shaped, or pleomorphic and measure 200 nm in diameter; 320 nm in length; 100 nm in height displaying tubular units. The core is biconcave with two lateral bodies. Nested between the core membrane, or between the surface membrane.

Nucleic Acid

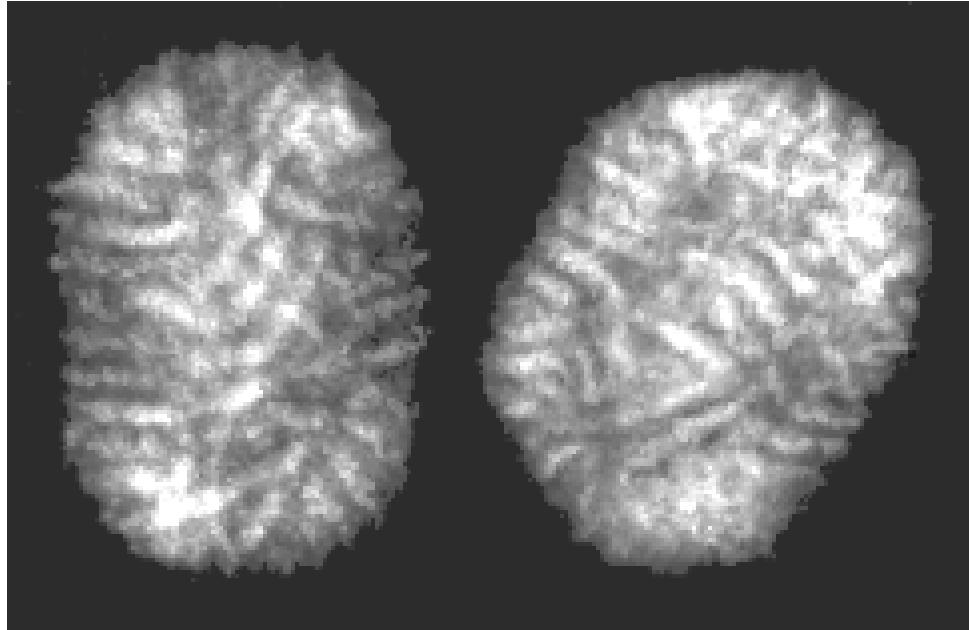
The genome is not segmented and contains a single molecule of linear double-stranded DNA. The complete genome is 180000-200000 nucleotides long. The genome has a guanine + cytosine content of 60 %. The genome sequence has termini with cross-linked hairpin ends (i.e. single-stranded loops thus forming one continuous polynucleotide chain). The genome has terminally redundant sequences. The terminally redundant sequences have inverted terminal repetitions (ITR). The genome sequence is repeated at both ends. Double-stranded DNA is covalently. Double-stranded DNA is linked at both ends.

Proteins

The viral genome encodes structural proteins and non-structural proteins.

Lipids

Lipids are present and located in the envelope. Virions are composed of 4% lipids by weight. The composition of viral lipids and host cell membranes are similar. The lipids are host derived and synthesized *de novo* (during the early phase of virus replication) and are derived from plasma membranes. Viral membranes include glycolipids.



Molluscipox virus

PATHOGENESIS

Molluscum contagiosum virus is known to infect only the epidermis. The initial infection seems to occur in the basal layer, and it may be accompanied by a latent period of as long as 6 months. The incubation period is usually shorter (ie, 2-7 wk). This is suggested by the fact that while viral particles are noted in the basal layer, viral DNA replication and the formation of new viral particles do not occur until the spindle and granular layers of the epidermis are involved. Occasionally, the lesions can progress beyond the local cellular proliferation, and they can become inflamed with the attendant edema, increased vascularity, and infiltration by neutrophils, lymphocytes, and monocytes. Usually, this only occurs if there is a secondary bacterial infection or if rupture into the dermis occurs. More severe cases also have been noted in patients who are receiving prednisone and methotrexate. The virus infrequently induces antibody formation; therefore, it is not strongly immunogenic, and reinfection is common. <http://www.emedicine>

Histological Findings

The epidermis is acanthotic and may measure up to 6 times the normal thickness.

Basal cells are slightly larger and more columnar than normal, with dense and granular nuclei.

Above the basal keratinocytes are enlarged keratinocytes with a deep purple appearance.

The molluscum body is the result of a virally induced cytoplasmic transformation that begins in the lower cells of the epidermis, just above the basal cell layer.

Keratinocytes contain multiple Feulgen-positive intracytoplasmic inclusion bodies (Henderson-Patterson or molluscum bodies) containing viral particles that can be identified in the cells of stratum spinosum.

The viral particles increase in size as they progress up toward the granular layer causing compression of the nucleus to the periphery of the infected keratinocytes.

The core of the down-growth of the central stratum corneum of the papules is largely replaced by viral particles.

The dermis under the infected lobule of epidermis is normal except for occasional inflammation.

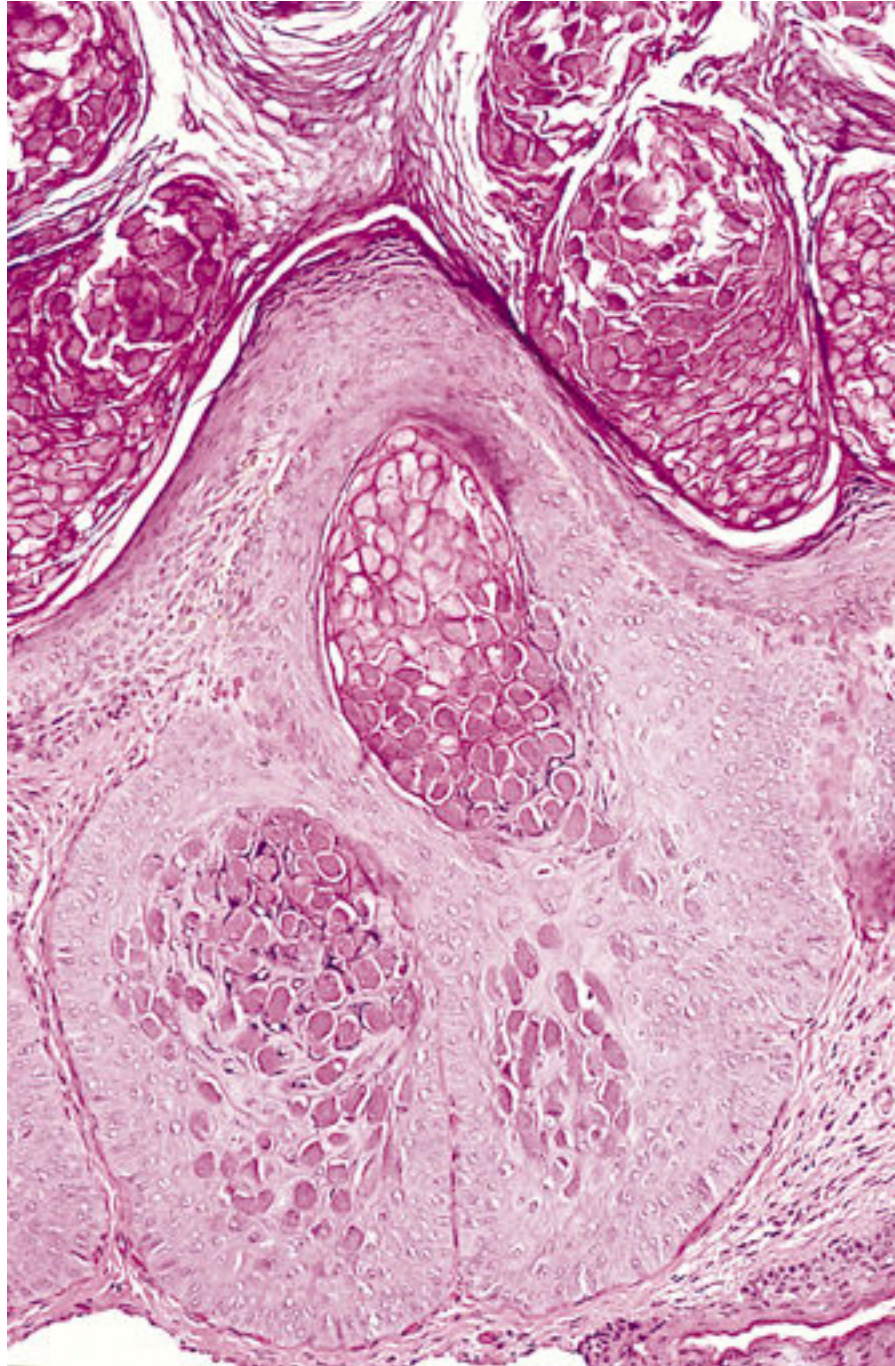
Approximately 17% of molluscum contagiosum lesions may have an inflammatory reaction.

In HIV-infected patients, acanthosis, hyperkeratosis, and nuclear atypia are also present. In these patients, viral structures may be present up to 1 cm away from clinically observed lesions.



Molluscum Contagiosum

Molluscum contagiosum. The lesion shows a symmetric downgrowth of epithelium and central cornified plug



Molluscum Contagiosum

The central cornified plug contains numerous molluscum bodies. These bodies are eosinophilic, rounded cytoplasmic inclusions with bubbly quality

CONDITIONS AFFECTING PATHOGENESIS

Cell-mediated immunity is thought to be important in modulating and controlling the infection because children and HIV-infected patients are noted to have more

widespread and persistent lesions. The incidence and severity of molluscum in HIV-positive and AIDS patients appears to be inversely related to the CD4 count.

CLINICAL FEATURES



Molluscum Contagiosum

Symptoms

The skin lesion commonly has the following characteristics :

Molluscum contagiosum usually presents as single or multiple (i.e. usually no more than 20) discrete, small, their diameter usually is 2-5 mm; however, it may be up to 3 cm

Dimple in center

Initially firm, flesh-colored, pearl-like, dome-shaped

Later lesions become softer, gray, and may drain

Central core or plug of white, cheesy or waxy material Painless

The lesions may be tender or pruritic.

Single or multiple (usually multiple)

Common locations in children: face, trunk, limbs

Common locations in adults: genitals, abdomen, inner thigh They may spontaneously resolve and are sometimes dismissed by the patient and physician. If very mild, they may not be noticed by the patient.

If superinfection already has taken place, the lesions may present as pustules, possibly painful, with erythema and induration.

In general, the disorder is not accompanied by systemic symptoms (eg, fever, nausea, malaise).

DIAGNOSIS:

Physical:

The physician should note multiple well-defined papules that measure approximately 2-5 mm in diameter.

Typically, these lesions have a waxy appearance and a central umbilication. They may appear migratory, as individual lesions usually spontaneously resolve over weeks, while new lesions appear elsewhere.

When the disease appears in an immunocompromised patient, the lesions are more widespread and can be as large as 10-15 mm in diameter.

If the lesions are superinfected, they show typical signs of bacterial infection (eg, erythema, edema, tenderness, purulence, fever, regional lymphadenopathy).

1) Laboratory diagnosis:

The diagnosis of molluscum contagiosum usually is clinically based upon the appearance and locations of the lesions.

Staining of thin smears with Giemsa, Gram, or Wright stain should reveal infected cells.

Other Tests:

Molluscum contagiosum viral (MCV) antigens can be detected by fluorescent antibody studies.

Electron microscopy may identify individual viral particles.

Procedures:

Biopsy

Lesions may be biopsied. With hematoxylin and eosin (H&E) staining, the clinician can demonstrate characteristic changes in the epidermis.

Biopsy is particularly important in cases where the diagnosis is not clear.

DIFFERENTIAL DIAGNOSIS:

Dermatitis, Atopic

Granuloma, Annulare and Pyogenic

Herpes Simplex

Herpes Zoster

Warts, Genital

Warts, Plantar

COMPLICATIONS:-

Bacterial superinfection by *Staphylococcus aureus*, *Staphylococcus epidermidis*, *Streptococcus* species

Autoinoculation

Possible extensive infections in immunocompromised individuals

PROGNOSIS:

The prognosis generally is excellent since the disease usually is self-limited.

In immunocompetent patients, the lesions generally last for 2-4 weeks. The disease usually resolves completely in 2-4 years.

Recurrences of lesions can occur after the initial clearing in as many as 35% of patients. This is of unknown significance because it may represent reinfection, exacerbation of ongoing disease, or new lesions arising after a prolonged latent period.

In patients who are infected with HIV or are otherwise immunocompromised, the disease often becomes more generalized, more prolonged, and resistant to treatment.

Antiretroviral therapy to restore immune system function has been found to improve MCV infection

PREVENTION:-

Physical contact with infected individuals should be avoided. Sharing of clothing and towels should be avoided.

Most of the adolescent and adult cases are secondary to sexual contact. Abstinence and careful selection of sexual partners are important. It is unclear if condoms are effective in preventing the spread of molluscum contagiosum.

Good personal hygiene is a key factor in avoiding transmission of this disease.

Patient Education:

For infection in children, the physician should stress the benign nature of this ubiquitous disease. However, it can be embarrassing and unsightly for the patient.

Limiting physical contact with infected individuals and improving personal hygiene should reduce transmission and autoinoculation of the virus.

Parents should be instructed to watch for possible superinfection (eg, bacterial), which occurs in up to 40% of all cases.

It is not necessary to keep infected children out of school, although physical contact and sharing of clothes and towels should be discouraged. Sharing of baths should also probably be avoided. Daycare centers may refuse patients with uncovered lesions.

This disease usually is sexually transmitted in adolescent and adult patient populations, although casual contact may also result in transmission. Safe sex practices and/or abstinence should be discussed, although it is unclear whether condoms and other barrier methods provide adequate protection against the transmission of molluscum contagiosum.

Patient educators must stress that not all sexually transmitted diseases are as benign as molluscum contagiosum (eg, herpes simplex, gonorrhea, chlamydia, HIV). Abstinence should be practiced until lesions resolve. In patients with multiple sexual partners and/or other risk factors, HIV testing is strongly recommended.

It is important to note that not all cases in adults are sexually transmitted. Casual skin contact can also result in infection. This diagnosis could cause significant relationship stress.

Repertorial Representation Of The Signs And Symptoms Of Molluscum Contagiosum

MURPHY –

Diseases, molluscum contagiosum *brom*, *bry*, *calc*, *calc-ar*, *kali-i*, *lyc*, *merc*, *merc-s*, *nat-m*, *sil*, *sulph*, *teucr*, *thuj*

SYNTHESIS

SKIN Eruption contagiosum; molluscum: *calc*, *sil*.

HOMOEOPATHIC CONCEPT

Molluscum contagiosum can be considered as an acute disease according to classification by Dr.Samuel Hahnemann. He classified diseases mainly in to two.

In §72 He says The diseases to which man is liable are either rapid morbid processes of the abnormally deranged vital force, which have a tendency of finish their course more or less quickly, but always in a moderate time-these are termed acute diseases; or they are diseases of such a character that, with small, often imperceptible beginnings, dynamically derange the living organism, each in its own peculiar manner , and cause it gradually to deviate from the healthy condition, in such a way that the automatic life energy, called vital force, whose office is to preserve the health, only opposes to them at the commencement and during their progress imperfect, unsuitable, useless resistance, but is unable of itself to extinguish them, but must helplessly suffer (them to spread and) it self to be ever more and more abnormally deranged, until at length the organism is destroyed; these are termed chronic disease. They are caused by infection with a chronic miasm.

Homoeopathy has quite a different criteria for classifying diseases into acute and chronic. Basis time is too mechanical to be accepted as reasonable. We do not say that a disease is acute is the patient has been suffering form it for so many days only and chronic is more than some days. According to us a disease is chronic or acute by its nature; no matter what the length of period of suffering from that disease may be. Thus a chronic disease is chronic from the very beginning even if the patient is suffering from it only for one day an acute disease is acute even if patient is suffering from it six months or more.

J.H.Allen:

New growths are in themselves a life study; when I speak of new growths, I mean all of a benign or malignant origin; all are due to miasmatic origin and to miasmatic influence upon the life force. When we speak of new growths, we mean of course, false growth, abnormal growths, or falsifications in parts and organs of the body.

H.A.Roberts

In the secondary period of sycosis al most every disease that may arise takes on the inflammatory nature in some form; it may be acute, subacute or chronic.

Sycotic manifestations are characterised by slowness of recovery

Sycosis never gives a true ulcer; the sycotic manifestations are more overgrowth of tissue than destructive of tissue. There are many warts and warty growths; these are sycotic signposts

The sycotic skin manifestations tend toward overgrowth or extra deposits pg230 232 236

Dr. Harimohan Choudhry:

Psora Vesicles of the itch- voluptuous, tickling, itching.

Sycotic Wart and warty growths, sycotic manifestations are characterised by slowness of recovery

Dr. Subrata Kumar Banerjee.

Vesicular eruptions are generally sycotic 122

Molluscum contagiosum(syco-psoric)123, 167

Vesicular eruptions which do not heal quickly are sycotic124

Sycosis has vesicular eruptions 153

Phyllis speight

Psora Vesicle of the itch-volumptous tickling and itching

Sycosis warty eruptions or growths.

MOLLUSCUM CONTAGIOSUM IN HOMOEOPATHIC LITERATURE

Clarke:

Clarke's Dictionary Of Practical Materia Medica.

A Dictionary of Practical Materia Medica

by John Henry Clarke M.D.

Molluscum contagiosum is seen in the clinical section of calcarea carb, silicea and sulphur.

Robin Murphy ND

Lotus Materia Medica. By Robin Murphy ND

Molluscum contagiosum is seen in the clinical section of, silicea and sulphur.

Rajan Sankran

Spirit of Homoeopathy

By Rajan Sankran

Interview with Dr. R. Sankaran by S.M. Gunavante

Published in "The Homoeopathic Heritage", June 1990

Dr. Sarabhai Kapadia had a case of molluscum contagiosum. He took a full history, but could not get any characteristic symptoms. After an hour of taking the case, he saw the child scratching the head. The mother said that whenever the boy is sleepy, he does this. On the basis of Kent's Repertory: "Head: itching of scalp, sleep, when going to",

In section concomitants

Concomitants need not always be general symptoms. Sometimes, they are particular in a part of the body but have no pathological basis for their existence. My teacher successfully prescribed *Agnus castus* in the case of a child with molluscum contagiosum using the symptom "Itching of scalp when going to sleep". Dr. Sarabhai prescribed *Agnus castus* (perhaps 1M) and the molluscum disappeared soon, though the remedy does not cover the complaint.

NOTES ON MINIMUM DOSE

Small doses and homoeopathy are commonly regarded as synonymous terms. It is not to be denied that the subject of the dose in homoeopathy is a very important one. The three essential elements of the system are the principle, the remedy and the dose; and the three are of equal importance. The selection of the dose is as much an integral part of the process of making a homoeopathic prescription as the selection of the remedy, and often quite as important. A well selected remedy may fail utterly, or even do injury, because of wrong dosage. Dose as well as remedy must be adjusted to the patient's need. The minimum dose, which is a dose so small that it is not capable of producing symptoms when used therapeutically. Homoeopathy requires that the therapeutic dose must be capable only of producing a slight temporary aggravation or intensification of already existing symptoms, never of producing new symptoms. Only the similar remedy, in the smallest possible dose, is capable of bringing about this highly desirable result.

Before Hahnemann's time, and indeed in his early work, the dose played an important part. Nothing but crude and massive doses had ever been used in the care of the sick. All physicians used these massive doses as a matter of course, and Hahnemann, being a product of the best training of that day, followed, in his early career, in the footsteps of his predecessors. Even after Hahnemann began to see the light of the law of cure he continued to use massive doses, and it is to be remembered that he made cures with massive doses of crude medicine, but from his close observations and continual experiments he found that he was obtaining drug effects oftener than he was making a successful cure.

When he became convinced of this, he reduced the dose, dividing and again dividing the dose, watching closely the results. He soon found that the smaller the dose, the more beneficent the results. His experiments with the divided dose did not come until after he had discovered the dynamic action of disease; then with his logical mind he must of necessity have correlated his results from the larger doses and brought his ideas of dosage in to correlation with the same concept. For if disease be dynamic in nature, the use of a remedy to cure, or even to reach the disease, must be dynamic, rather than physiological, in form and power. The more Hahnemann became convinced of the dynamic nature of disease, the more he sought the dynamic plane in medicine, and the more beneficial he found the administration of the similia. Very, very gradually, the minimum dose, which is always a flexible measure, became ever smaller and smaller, until it has developed into the infinitesimal.

Only simple medicine is to be given to the patient at a time. That is the alpha and omega of Hahnemann's fight against the multi-mixtures of his time and is the necessary foundation for medicinal treatment of patients according to his new law of healing. But when the correct remedy has been chosen according to the law of similars, only one half of the difficulty of homoeopathic treatment has been overcome. It is often difficult to decide what quantity of the suitable remedy will be most adaptable to the sick organism and most speedily effective. Hahnemann devoted more

than forty years of his life to the solution of this problem, and did not complete the task.

Before discovering the law of similars Hahnemann's medicinal treatment of his patients differed slightly from that of other physicians. In his notes on Cullen's *Materia medica* and Munro's pharmacology he went to certain extent beyond the prescriptions of these physicians by recommending stronger medicine in even larger doses. At the same time he advised caution and very small doses, particularly in the case of narcotic medicinal herbs and arsenic.

When in 1796, he first known the principles of homoeopathy in Hufeland's journal ("Essay on new principle," etc.), he frequently recommended the administration of "small doses", but he did not the say what he meant by "small." From the contents of the dissertation, however, it is evident that he meant the medicinal doses, which depend directly on their physiological effect and which therefore measured according to his later views were still comparatively large in quantity and effect.

The "Homoeopathic aggravation" induced him gradually to decrease the dose. The first hints of dilutions are to be found in translation of second part of the "Edinburgh Dispensatorium" in 1798. Silver nitrate was recommended by Boerhave in doses of 2 grains, worked upto into pills with breadcrumbs and sugar Hahnnean considered that too strong and suggested a much diluted preparation. In 1799 he suddenly announced without particular explanation very small and so called infinitesimal doses. In the "Treasury of Medicine" or the "Collection of selected Prescriptions"(1800) there is increasing number of remarks concerning very much smaller doses.

First detailed statement about dilution was made in connection with the publication of his curative measure and preventive for scarlet fever (1801). For an interval of four years he did not again refer to the question of doses. He spoke again of the smallest possible doses in which remedies are used, in the article "Medicine of experience" in Hufland's journal. Few general indications are all that we can find from Hahnemann's published works concerning the development of the

homoeopathic theory of doses during the years 1801-1806. The diaries of 1807 and 1808 afford little information regards the further process of clarification.

The writings of 1809 do not disclose any marked further develop. In the year 1810 brought forth the "Organon". Whoever expects a detailed treatment of the dosage question in this first edition of Hahnemann's fundamental treatise is doomed to disappointment. In 1811 the first part of "Materia Medica Pura" appeared; not a word is mentioned regarding the size of dose.

In 1813 Hahnemann published in the "Allg. Anz. d. Deutschen" the dissertation "Spirit of the New Theory of Healing", which later become so well known. Even here the dosage question is untouched upon in general, when he says: "the spiritual power of the medicine attains its purpose not by quantity but by quality (dynamic suitability, homoeopathy)." But from the year 1812 we know that in the epidemic of intermittent fever the raging he prescribed Arnica in the 18th and Nux vomica in the 9th centesimal dilution. In 1814 in the article about "The treatment of Typhus fever at present prevailing. Bryonia and Rhus being administered in the 12th centesimal dilution and Hyoscyamus in 8th. There are accurate statement regarding the homoeopathic theory of dosage in the second volume of the "Materia Medica Pura" 1816, with instructions for each individual remedy concerning dilution and size of dose. The third (1817) and fourth (1818) editions of "Materia Medica Pura" contains exact instructions of doses of different medicines.

The year 1819 gives an insight into the dosage theory of that time by three different publications. First there appeared the fifth volume of the "Materia Medica Pura," containing the following statements:

Of Euphrasia, Menyanthes and Sambucus the smallest part of a drop of the tincture is given. But for delicate persons and children still further dilutions will be necessary. Cyclamen is recommended in the third dilution. Of Calcarea acetica, Hahnemann prescribes one drop of the saturated solution In Acidum muriaticum the

smallest part of the thousandth dilution serves as a medicinal dose. (This correspond to day to our third decimal potency.) Thuja is administered in very small doses of the 30th potency, Taraxacum undiluted as a tincture in drops. In Phosphori acidum a small part of a drop of the second dilution is to be employed as a dose. Spigelia and: Staphisagria are recommended in their 30th potency.

The second publication in the same year was the second edition of the "*Organon*." In it a series of paragraphs was devoted to the question of doses (§§300—308). The value now attributed to the size of the dose by Hahnemann is shown by the following words of §300:

The suitability of a medicine for any given case of illness depends not only on a relevant homoeopathic selection, but just as much on the correct quantity necessary or rather the smallness of the dose.

In §302 the appositely selected homoeopathic medicine is declared to be the more curative," the more its dose descends to the degree of smallness most suitable for gentle aid." Hahnemann lays great stress in §303 on the fact that the fixing of the dilution degree for the individual remedies should not be the " work of theoretical assumptions," but can only be determined by clear experiments, careful observation and accurate experience, with regard to details he refers to his statements in the " *Materia Medica Pura*" emphasising particularly the advantages accruing from administering the medicinal substances in even smaller doses, and from diluting them even more than he had there stated.

A third publication of the year 1819, " On uncharitableness to suicides recommended pure gold (aurum) in its 6th potency, whilst, as is known it had been given a year previously in doses of several grains of the first and second triturations. In the sixth and last volume of the "*Materia Medica Pura*" appering in the year 1821, the expression "the smallest part of drop" which we frequently encountered in the fifth volume is constantly recurring. During the following years there is little report.

From the various volumes of second edition of the "Materia Medica Pura" which appeared from 1824 to 1827 and from Hahnemann's correspondence particularly with his friend colleague Stapf, we can see how in the course of years he gradually increased the dilution of remedies.

In his Organon of medicine in the aphorisms 112, 128, 156, 157, 159, 160 and 275- 287 emphasizing the necessity of the minute dose for the treatment.

In Hahnemann's Chronic Disease he is equally emphatic when he says:

But when these aggravated original symptoms appear later on in the same strength as at the beginning, or even more strongly later on, this is a sign that the dose of this antipsoric remedy, although it was correctly selected, was too great, and caused the fear that no cure could be effected through it, since medicines given in so large a dose are able to establish a disease which in some respects is similar, but even greater and more troublesome, without extinguishing the old disease. This is caused by the fact that the medicine used in so large a dose also its other symptoms which nullify its similarity and thus establishes another dissimilar disease, also chronic, in place of the former.

Again he says:

This (the large dose of medicine) finds its decision already in the first sixteen, eighteen or twenty days of the effect of the medicine given in too large a dose, as it much then be checked,

either by prescribing its antidote, or when this is not known, by giving another antipsoric medicine, as suitable as possible to the symptoms then prevailing, and this in a very moderate dose, and when this is not yet sufficient for abolishing this sinister medicinal disease by prescribing a second medicine as suitable as possible at that time. . . . When the stormy assault of the excessive dose of even a correctly selected homoeopathic remedy has been assuaged by the following use of an antidote or the later use of some other antipsoric remedy, this remedy which had only proved injurious through its excessive strength may be used Again, and indeed as it is

homoeopathically indicated with the best success, only in a far smaller dose and in a far more potentized attenuation.

And still again:

No harm will be done if the dose given is even smaller than I have indicated. It can hardly be too small if only everything is avoided that might interfere with the action of the medicine or obstruct it. . . . they will even then do everything of good that can in general be expected of medicine, if only the antipsoric was selected correctly in all respects as to the carefully examined symptoms of the disease and was thus homoeopathic, and the patient did not by his actions disturb the medicine in its action. . . . On the other hand, we have the great advantage that even if in some case the selection should not have been made quite suitably; we have the great advantage that we can easily put out of the wrong medicine in its minimal dose in the manner indicated above, when the treatment can be continued with a suitable antipsoric delay.

If prescribes in general, and especially those starting on the path of homoeopathic prescribing, would take special note of this warning, they would save themselves much trouble and their patients much needless suffering. Hahnemann felt the waste of time, effort, and actual suffering needlessly caused, when he cried:

What would they have risked if they had at once heeded my words and had first made use of these small doses?

In § 275 he mentions

"The suitability of a medicine for any given case of disease does not depend on its accurate homoeopathic selection alone, but likewise on the proper size, or rather smallness, of the dose."

Materials and Methods

Population:

The present study was carried out at the Government Homoeopathic Medical College, Kozhikode, from April 2005 to April 2006. Patients in the age group 1 – 15years, coming to the OPD and IPD were selected for the study.

Criteria:

Inclusion criteria: Patients fitting into clinical presentation of mollusum contagiosum were taken for the study.

Both sexes were taken for the study

Exclusion criteria: Patient aged more than 15 years is excluded

Diagnostic criteria: clinical features of mollusum contagiosum

Medicines: In the selection of medicines the approach was to individualize each case based on homoeopathic principles.

Repetition and change in potency was based on homoeopathic principles.

Research technique.

Cases are reviewed for a period of 2 months or until the disappearance of symptom

The method of approach was a comparative clinical study two groups of patients, who took homoeopathic treatment and patients who were not taken any treatment for more than 6 months.

Assessment criteria

Assessment is done by comparing the two groups of patients

Out of 35 cases attended with symptoms of mollusum contagiosum 15 cases considered as cases not treated as they were not taken any treatment for the first 6 months and 20 cases treated with homoeopathic medicine of these, the following results were obtained.

Result Of Treatment

	No relief	Relief
With homoeopathic treatment	2	18
Without any treatment	14	1

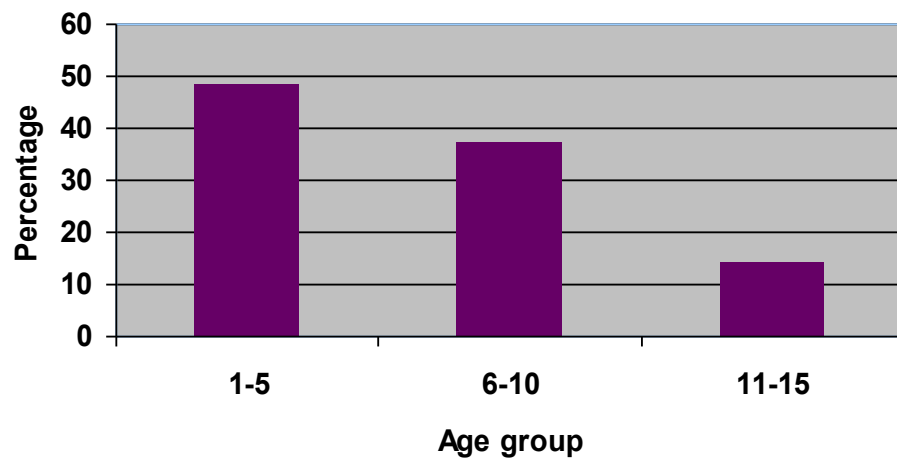
This result is tested by chi square test for independence

Observation and Discussion

DISTRIBUTION OF PATIENTS ACCORDING TO AGE

Age group	No	%
1-5	17	48.57
6-10	13	37.14
11-15	5	14.29

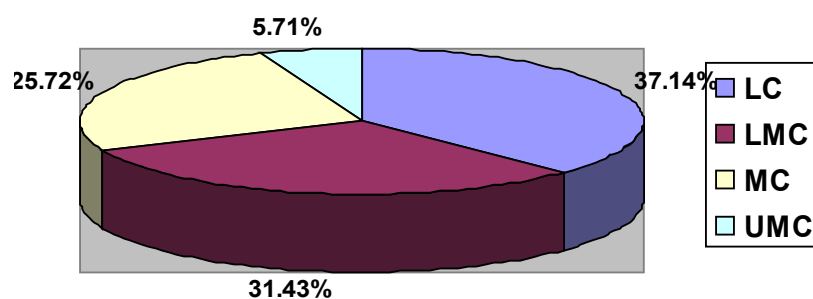
Out of the 35 patients studied 17 patients (48.57%) were between the age group 1-5, 13 patients (37.14%) were between age group 6-10 and 5 patients (14.29%) were between.



DISTRIBUTION OF PATIENTS ACCORDING TO SOCIOECONOMIC STATUS

Socioeconomic status	No	%
Lower	13	37.14
lower middle	11	31.43
middle	9	25.72
upper middle	2	5.71

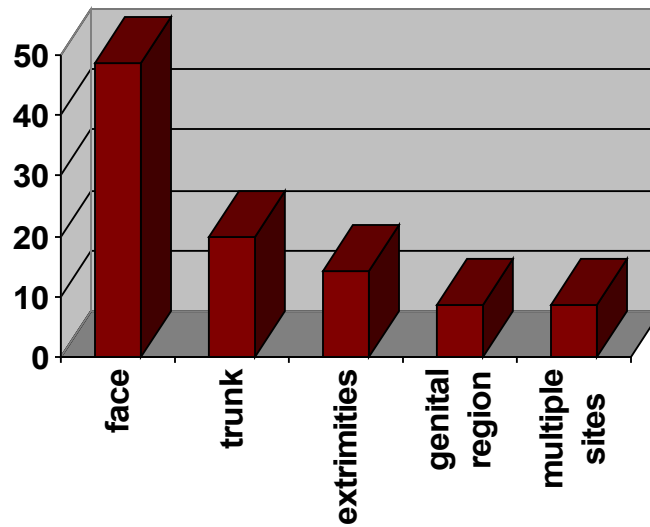
Out of the 35 patients studied 13 patients(37.14%) were under the low socioeconomic status. 11 patients (31.43%) belongs to lower middle class. 9 patients (25.72%) belongs to middle class and 2 patients (5.71%) belongs to upper middle class.



DISTRIBUTION OF PATIENTS ACCORDING TO THE LOCATION OF PRESENTING COMPLAINTS.

location	no	%
face	17	48.57
trunk	7	20.00
extrimities	5	14.29
genital region	3	8.57
multiple sites	3	8.57

Out of the 35 patients studied 17 patients (48.57%) had eruption on the face, 7 patients (20%) had eruption on trunk and 3 patients (14.29%) had eruption on extremities 3 patients (8.57%) had eruption on the genital region and 3 patients (8.57%) had eruption on multiple sites the presented.

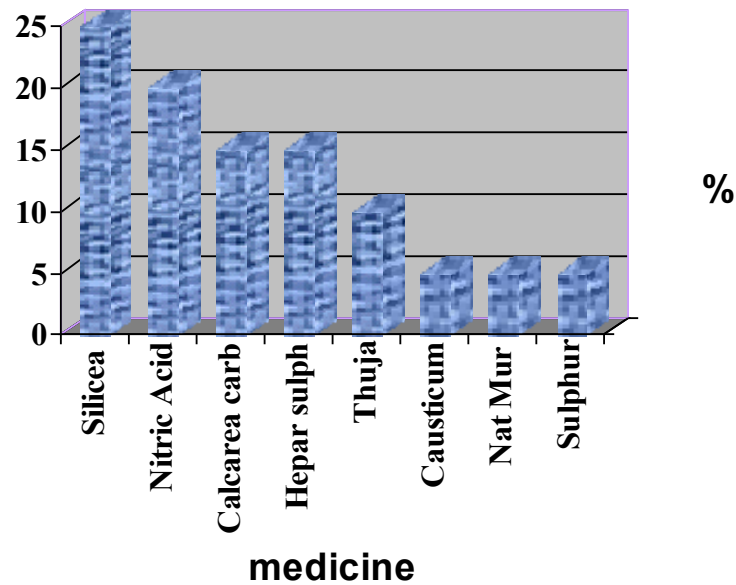


DISTRIBUTION OF MEDICINES USED IN THE STUDY

Drugs	Potency	Number	%
Silicea	200, 1M,10M	5	25
Nitric acid	1M	4	20
Calcarea carb	200, 1M	3	15
Hepar sulph	200,1M	3	15
Thuja	200,1M	2	10
Causticum	1M	1	5
Natrum mur	1M	1	5
Sulphur	1M	1	5

Silicea was found effective in 5 (25%) cases. Nitric acid in 4(20%), Calcarea carb in 3 (15%), Hepar sulph in 3 (15%), Thuja in 2 (10%), Causticum, Natrum mur, Sulphur was found effective in 1 (5%) case each.

Distribution of Medicine used in the study



STATISTICAL ANALYSIS

	No relief	Relief	Total
With homoeopathic treatment	2	18	20
Without any treatment	14	1	15
Total	16	19	35

To inference in the effectiveness of homoeopathic treatment Let us assume,

H_0 : relief in the molluscum contagiosum cases is independent of homoeopathic treatment

H_1 : relief in the molluscum contagiosum cases is not independent of homoeopathic treatment.

Calculation of test statistic

Here one of the cell frequency viz 2 is less than 5 we apply Yate's correction. Thus under H_0 , the statistic is

$$\chi^2 = \frac{N[|ad - bc| - \frac{N}{2}]^2}{(a+b)(c+d)(a+c)(b+d)}$$

Here $N=35$, $a=2$, $b=18$, $c=14$, $d=1$

$$\chi^2 = \frac{35[|2 \times 1 - 18 \times 14| - \frac{35}{2}]^2}{(2+18)(14+1)(2+14)(18+1)}$$

$$\chi^2 = \frac{35[|2 - 252| - 17.5]^2}{20 \times 15 \times 16 \times 19}$$

$$\chi^2 = \frac{35 \times 232.5^2}{91200}$$

$$\chi^2 = \frac{35 \times 54056.25}{91200}$$

$$\chi^2 = 20.7452$$

For 1% level of significance 1 degree of freedom the table χ^2 is 3.841. since the calculated value of χ^2 is more than the table value, H_0 is rejected. i.e ; The Homoeopathic treatment is effective in the management of molluscum contagiosum.

In the present study 35 patients who attended OPD of Organon of Medicine from April 2005 – to April 2006 were included. These patients belonged to various socio-economic status and age group between 1-15 years. The results of the study were evaluated using statistical principles.

Maximum age group affected 1-5 years. And the incidence more in lower class. Miasm in the background was found to be psorosycotic.

In this study the efficacy of homoeopathic treatment of mollusum contagiosum was evaluated. Assessment was based on the changes in clinical presentation before and after treatment.

After statistical analysis, the calculated value was 20.7452 which was well above the tabled value at 5% and levels. Thus, this study provides an evidence to say that homoeopathic medicines are effective in managing this condition.

Medicinal management was found to be very much effective. Silicea was found effective in 5 (25%) cases. Nitric acid in 4(20%), Calcarea carb in 3 (15%), Hepar sulph in 3 (15%), Thuja in 2 (10%), Causticum, Natrum mur, Sulphur was found effective in 1 (5%) case each

CONCLUSION

The following salient conclusions have been drawn from the present study after summarizing its findings.

- 1) Homoeopathic medicines are effective in the management of mollusum contagiosum
- 2) Age group mostly affected is between 1-5 years.
- 3) Incidence of the disease more in lower class and low socio economic class.
- 4) Psora and sycosis is the predominant miasm in the background.

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