

NIDCR, patients' advocates work to solve TMJ puzzle

Temporomandibular Joint Diseases and Disorders (TMJD's), commonly called "TMJ"

Patients' Advocacy Groups: "Lcy"Lqkpvu" ("Cnkgf" Owuewnq/Umgngvcn" Fkuqtfgtu"Hqwpfcvkqp"*LLCOF+="Vjg" VOL"Cuuqekcvkqp"*VOLC+

Scope: Disorders and diseases of the joints and musc- engu"eqppgevkpi"vjg"nqygt"lcy"*o cpfkdng+"vq"vjg"umwmm=" presents as pain or dysfunction in sensory and motor activity throughout the body

Estimated affected Americans: 10 million of both genders and all ages experience TMJD's annually

This poorly understood and often misdiagnosed range of conditions can involve craniofacial pain or dysfunction, jgcfcjgu."fkhLewnv{"urgcmkpi."jgctkpi."etgykpi"cpf"uycn- nqykpi"cu"ygm"cu"pwogtqwu"tcfkcvkpi"rckpu"qt"ff{uhwpevkpu" throughout the body. Problems can be short-term, resolv- kpi"ykvjqwv"vtgcvogpv."vq"ejtqpk"cpf"kpvtcevdngl

The multiple and perplexing symptoms of TMJ place it primarily as an oral health rather than a medical issue, yjkej"eqphqwpfu"ghhqtvu"cv"tgugcte.j."fkcipqku."vtgcvogpv" cpf"rcvkpvp"dpggLvul""Rcvkpv"cfxqece{"qti cpk|cvkqpu"yqtm" ykvj"vjg"jgcnvj"uekpegu"eqoowpkv{"vq"hwvtjgt"tgugcte.j." gfwevcvkqp"cpf"ykgfurgtgc"rwdnke"cyctgpguu"qh"VOLl

The NIDCR's expanded research portfolio includes pgy"oqngewmct"cpf"igpgvke"uwfkgu"qh"rckp"cu"ygm"cu"cp"kp- vkcvkxg"vq"gzrnqtg"vjg"rcvjqrj{uknqikecn"ogejcpku"ou"nkpm- kpi"VOLFu"cpf"eq/oqtdkf"eqpfkvkqpu"Qvjgt"pgy"VOLF" kpkvkcvkxgu."eq/urqupqtgf"ykvj"qvjgt"PKJ"eqorqpgpvu."kp- xkvg"tgugcte.jgtu"vq"fgxgnqr"pgy"oqfgnu"qh"rckp"tgngxcpv"vq" the trigeminal system, study joint degeneration in a mouse model, and conduct research on tinnitus.

The Institute is also supporting a major prospective uvwf{"vtcemkpi"ugxgtcn"vjqwucpf"ogp"cpf"yqogp"ykvjqwv" VOLFOu"hqt"ugxgp" {gctul""Fwtkpi"vjg"uwf{"rgtkqf."c"hg y"

jwpftgf"qh"vjg"uwlgevu"yknn"fgxgnqr"u{o rvqou."cpf"vjg"kp- xguvki cvqtu"jqrq"vq"ngctp"y j {"uqog"rgqrng"ctg"uwuegrvkdng" y jkng"qvjgtu"ctg"pqv0

NIDCR's agenda for TMJ includes stem cell, molecu- nct"dknqi {"cpf"igpgvke"tgugcte.j"fkxgtukLgf"cetquu"pwogt- ous universities and dental schools. The Institute also sup- rrtvu"ctqdwu"dkqgpi kpggtkpi"tgugcte.j"rqtvhqnq"ykvj"vjg" goal of developing tissue engineered temporomandibular joint replacement parts.

Cfxqece{"qti cpk|cvkqpu"ctg"eqmcdqtcvkpi"ykvj"iqxgtp- ment and other health research communities to enhance and advance the TMJD research agenda. Such interagency kpxqnxgogpv"qhhtu"ukipkLecpv"rtqokug"qh"kpctgcuksi"dcuke" science to understand the causes and ultimately achieve appropriate diagnosis, treatment, cures and prevention of TMJ.

Patient advocacy groups have established annual scien- vkL"eqphgtgpegu."ngevwtgu"cpf"ugokpctu"vjcv"dtkpi"ogfkecn" and dental professionals together to advance basic science, rwdnkecvkqp"cpf"qp/nkpg"rtxgpkqp"cpf"cyctgpguu"rtq- itco"u0"Vjg"LLCOF"Hqwpfcvkqp"jcu"kpvkcvgf"VOLFOF" RjF"Rquvfqevqten"Hgmnqyujkr"rtqitco"gorjck|kpi"itqyvj" cpf"fgxgnqr"ogpv"qh"vjg"lcy"lqkpvu"kp"ejknftgp."pgeguuct{"vq" understand the etiology of the disease from a basic science perspective.

Vjg"qti cpk|cvkqpu"Li jv"ht"rcvkpvpv0tki jvu"vq"kpwtcpeg" eqxgtcig."uwr rrtv"rcvkpvp"cpf"vjgkt"hc"oknku."cfxqecvg"ykvj" rqnke{/o cmgtu."cpf"fkugokpvcg"kpht"ocvkqp"cdqww"cfxcpe- es in research and treatment.

VOL"ku"ci"itqykpi"jgcnvj"ectg"eqpegtp"kp"qwt"uqekgv{" hqt"yjkej"ocp{"o{uvgtkgu"cpf"eqpvtcfkevqpu"uvknn"gzkuv0" Through ever-increasing advocacy, health and education rti tco"u."vjg"Cogtkecp"rwdnke"ku"ngctkpi"cdqww"kvu"uki pu" cpi"u{o rvqou"y jkng"tgugcte.j"ku"cfxcpeki"wpfgtucvfkpi" of this complex medical dilemma.

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Clues to rare birth disease may lie in embryonic stem cells

Moebius Syndrome is thought to be a genetic problem cuuqekcvgf"ykvj"ncem"qh"fgxgnqr"ogpv"kp"vyq"etcpkcn"pgtxgu" that affect movement in eye and facial muscles. Moebius is so rare that physicians may not diagnose it for months or years.

Rgqrng"chhgevfg"ctg"wpcdng"vq"uokng"qt"htqyp."dnkpm"qt" move their eyes laterally. The syndrome is often associated ykvj"rj{ukecn"eqornkecvkqpu"kp"qvjgt"rctvu"qh"vjg"dqf{0

Because the cause of Moebius is still undocumented, in- xguvki cvkqp"kpqv"vjg"fkutfgt"kpqxngxu"uvgo"egm"tgugcte.j0"Cpf" because the problem presents at birth, embryonic stem cell therapy is thought to be an appropriate research strategy.

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Moebius Syndrome

Patients' Advocacy Group<Oqgdkwu"U{pftqog"Hqwp- dation

Scope<cp"gzvtgogn{"tctg"dktvj"fkutfgt"ejctcevgtk|gf" by lifetime facial paralysis

Estimated affected Americans<qp{"c"hg y"jwpftgf" fqewogpvgf"ecugu"yqtnfykfg

