

SCIENTIA INTERNATIONAL

NOVAS DEL MENSE IN INTERLINGUA

Chirurgia.—Multe victimas de arthritis ignora le facto que nove procedimentos chirurgic existe que pote assister les. Dr. L. Marmor del Schola Medical del Universitate California reporta que tal procedimentos frequentemente pote restabli le functiones del mano, alleviar pena, e meliorar le apparentia. Il es nondum certe que le effectos del chirurgia es permanente, sed in certe patientes le effectos benefic jam se ha mantenite durante periodos de duo e mesmo quatro annos.

Hematologia.—Dr. J. Buettner-Janusch del Universitate Yale reportava al Association Anthropologic American que nove evidencias indica un progressive adaptation evolutionari del hemoglobina al requirimentos del cerebro in le curso del evolution del primatos e del homine. In prosimias, como le lemures, le hemoglobina rende su oxygeno rapidamente, de accordo con le habitos activissime de iste creaturas arboree. In le anthropoides, le division del primatos con le plus complexe disveloppamento cerebral, le rendimento de oxygeno ab le hemoglobina es minus rapide que in le primitive prosimias.

Meteorologia.—J. W. Beel del Corporation Sandia in Nove Mexico reportava al Societate Meteorologic American que explosiones atomic, ben que lor energia es un parve fraction del energia de un huracan, possibilemente pote esser utilisate a modificar le effectos de huracanes, o a cambiar lor curso. Un possibilitate es le explosion de un bomba de alte energia in le oculo del huracan. Theoricamente isto resultarea in le elevation ex le circulation del tempesta de un grande massa de aere sic e calide, e su reimplaciamiento per aere plus frigide, le qual, in su torno, debe impedir le disveloppamento del huracan.

Meteorologia.—Le tres satellites del serie Tiros del Status Unite se ha monstrate utile in le preparation de mappas meteorologic mundial. Tiros III ha obtenite photographias de 18 tempestas tropic in varie stadios de disveloppamento. Le plus notabile del successos de Tiros III esseva le discoperta del formation del huracan Esther. Informations recipite ab Tiros III ha essite utilisate per le Bureau Meteorologic del Status Unite in le revision de su mappas. Un conferentia international de meteorologos esseva convenite in Washington a fin de instruer le scientistas de altere nationes in le technicas del utilisation del satellites. In le anno veniente le satellites Tiros va esser reimplaciate per satellites del serie Nimbus le quales debe esser mesmo plus utile que le Tiros in le collection e transmission de informations meteorologic. Le Nimbus va esser lanciate in orbitas polar que permittera a omne nation obtener directemente ab le satellites un mappa comprehensive del nubes in su proprie area e in le areas vicin.

Pharmacologia.—Drs. L. Lasagna e T. J. DeKornfeld del Universitate Johns Hopkins reporta que le nove droga methotrimeprazina, un derivato de phenothiazina, ha essite utilisate successosemente como surrogato de morphina in un serie de casos chirurgic. Quando illo es prendite in injectiones le nove droga ha un effecto analgesic equal a illo de morphina, sed le nove droga non causa narcomania. Con doses oral le effecto analgesic esseva inadequate e indesirabile effectos secundari esseva observate. Nalorphina, le sol altere potente droga analgesic cognoscite que non causa narcomania, ha le infortunante disadvantage de causar bizarre symptomas mental.

Physica Atomic.—Le prime experimento del statunitense Commission de Energia Atomic

in le utilisation de explosiones atomic in le servicio de objectivos pacific occureva le 10 de decembre de iste anno. Un bomba atomic de un potentia moderate (equivalente a 5 kilotonnas de TNT) esseva explodite in le deserto de Nove Mexico a un profunditate de 360 metros, sub un deposito del sal. Le objectivo del test esseva le creation de un reservoir subterrane de calor—utilisabile pro fines industrial—a un costo economic, sin contaminar le aere o le aquas subterrane. Le successo—quasi complete—de iste experimento face probabile altere applicationes non-militar de bombas atomic.

Radiologia.—Durante le passate 15 annos un studio del effectos de radiationes therapeutic e industrial ha essite conducite in 8 hospitales in Anglaterra e Scotia. Sir A. Bradford-Hill del Schola London de Hygiene e Medicina Tropic ha preparate un reporto super le observations facite usque nunc. Ecce tres de su conclusiones principal: (1) Routinari examines roentgenologic de 8,000 feminas pregnante non ha resultate in leucemia o damnos genetic in le feminas o in lor infantes. (2) Nulle effectos perniciose de radiation esseva observate in 433 feminas qui laborava con radium in le manufactura de horologios lumineose. (3) Routinari examines roentgenologic executate in massa ha resultate in appreciable e innecessari exposition a radios X del glandulas sexual del patientes.

Recercas de Cancere.—Dr. F. L. Horsfall Jr., director del Instituto Sloan-Kettering pro Recercas de Cancere dice in un reporto que omne causas de cancere ha un elemento commun; un cambiamento del acido disoxyribonucleic intra le cellula. Iste substantia ha functiones importantissime in le hereditate e etiam in le disveloppamento del cellulas individual del corpore. Apparentemente cancere es causate per un alteration specific, ben que nondum definibile, del structura del acido disoxyribonucleic. In su reporto Dr. Horsfall mentiona le sequente specific progressos in recercas de cancere: (1) Il esseva trovate que un virus isolate ab transplantabile tumores human pote causar deformitates in le ossos immatur de hamsters neonate. (2) Alicun successos ha essite attingite in le uso de drogas toxic a limitar le crescimento de tumores durante que le tissus normal es protegit per un antidoto. (3) Methodos ha essite disveloppate pro le isolation del acido disoxyribonucleic ab le cancerogene virus de polyoma. (4) Studios de dece tumores, transplantate ab mammals ad in ovos fertile, indica que omne cancere ha su patrono characteristic de crescimento. (5) Un substantia simile a un virus ha essite identificate in animales que porta canceres transplantabile. (6) Un studio del influenza del glandula thyroide ha revelate interrelationes non previeamente cognoscite del functiones del glandulas endocrin. Iste interrelationes es probabilemente importante in le curso de numerose e diverse morbos. (7) Personas con cancere del tissus que forma le sanguine, in consequentia del debilitation de lor processos immunologic, accepta plus facilmente que individuos normal le transplantation de tissus ab altere personas. (8) Le virus Egypto 101 esseva trovate in cellulas cancerose de 14 patientes. In alicun casos un certe grado de retardation del cancere ha essite observate. (9) Un agente simile a un virus esseva isolate ab cellulas que habeva assumite characteristics cancerose post un periodo de incubation in culturas tissular. Observaciones preliminari indica que le introduction de iste agente in culturas de cellulas normal resulta in le apparition in illos de characteristics maligne.

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GENERAL SCIENCE

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