Búsqueda bibliográfica en ortopedia

CURSO: VET- ORTOPEDIA Y TRAUMATOLOGÍA

Diego Quinteros

DACVS (Diplomado del Colegio Americano de Cirujanos Veterinarios)

- **Semestre:** 2022

Objetivos de aprendizaje

- Luego de esta charla el participante será capaz de:
  - Definir los pasos que implican una búsqueda bibliográfica
  - Identificar fuentes confiables de información ortopédica
  - Realizar búsqueda bibliográfica de temas de interés
  - Evaluar la calidad de la información encontrada

Estar al día

- *No podemos ejercer con lo aprendido en la Universidad hace 20 o 25 años, cada año se publican miles de artículos científicos, muchos de ellos relacionados con nuestro trabajo*

Planeando la búsqueda

- No podemos leer todo
  - Selectivos
  - Encontrar información pertinente
    Uso efectivo

- Abordaje de búsqueda
  - Saber qué buscamos
  - Organizarse

- AHORRO DE TIEMPO Y ENERGÍA

Búsqueda exploratoria

- Investigo todo lo relacionado al tema
  - Un tema que me interesa y no conozco
  - Evaluar nuevas alternativas o descubrimientos en temas ya conocidos
  - Información actual para una charla

Búsqueda específica

- Derivada de la búsqueda exploratoria
  - Evaluación de artículos de revisión sobre un tema para luego explorar sobre una parte especial del tema
- Tema puntual
  - Variación de una técnica
  - Una técnica que nunca realicé

Búsqueda bibliográfica

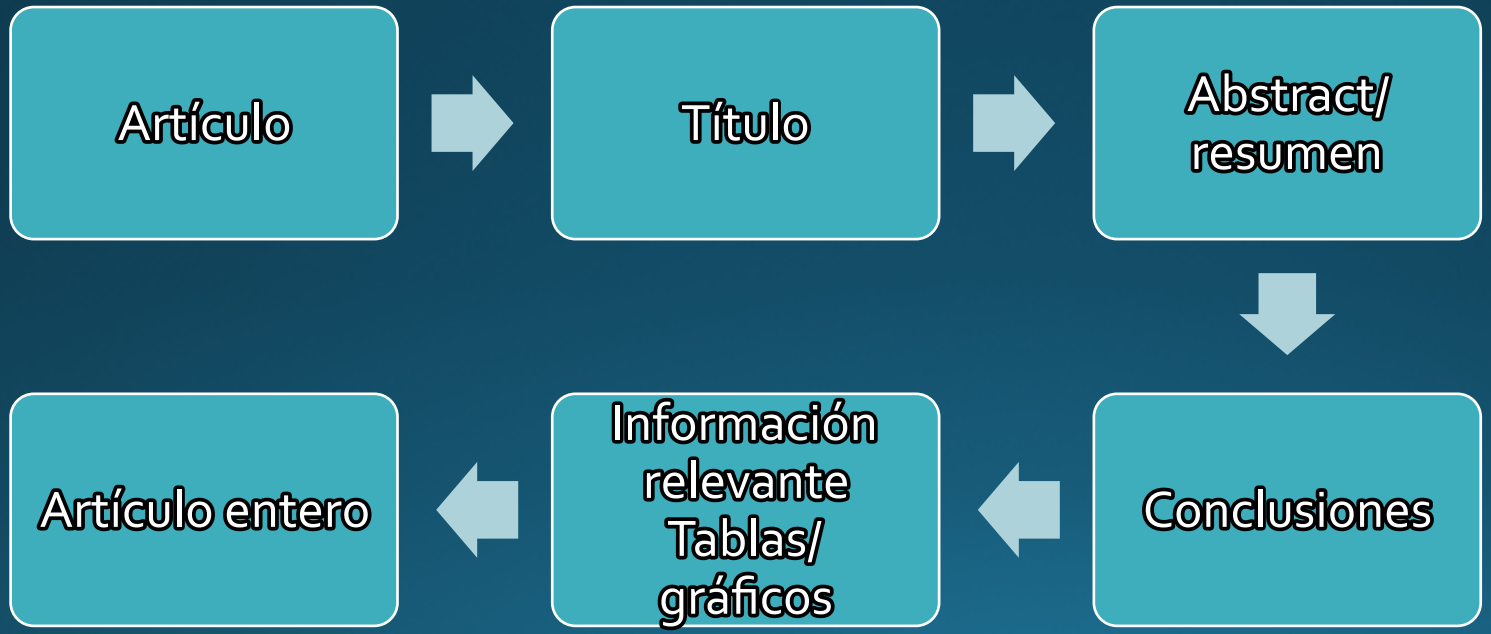
- Dedicar tiempo
- Buscadores de internet
- Accesos desde universidades
- Bibliotecas
  - Asesoramiento
  - https://www.youtube.com/watch?v=tDPphAbslUU (UBA FAC. VET)
  - https://getitforme.library.tamu.edu/msllocal/

Búsqueda bibliográfica

- Aislar los objetivos de búsqueda (foco en el tema)
- Documentar
  - Anotaciones (archivo de word o en carpetas electrónicas) con títulos y descripción – reporte de caso – revisión - etc
  - EndNote, ProCite o RefWorks
- Sistematizar
  - Ej : siempre buscar en varios buscadores en el mismo orden
- Ser selectivo
  - Fechas, fuentes, calidad del trabajo a evaluar

Selección y evaluación de los trabajos

- Seleccionar lo relevante vs. lo irrelevante



Estrategias de búsqueda

- Usar referencias de un artículo reciente (**bola de nieve**)
  - Cada fuente brinda más artículos
    - Reconocer y seguir autores de un tema específico

Estrategias de búsqueda

- Usar referencias de un artículo reciente (**bola de nieve**)
  - Desventajas
    - Sólo se vuelve al pasado
    - El tema se aleja cada vez más, quizás, de la pregunta original
    - Algunos autores limitan sus referencias a su idioma, país, etc.

Evaluando las fuentes

- ¿Es una publicación antigua o nueva relevante al tema?
- ¿Títulos o credenciales del autor?
- ¿Quién es el editor?
- ¿ El artículo fue revisado?
- ¿Es imparcial y objetivo?

Evaluando las fuentes

- Fuente electrónica:
  - ¿Quién es el responsable de la publicación?
  - ¿Links a otras fuentes confiables?
  - ¿Qué domino se usa para el acceso?

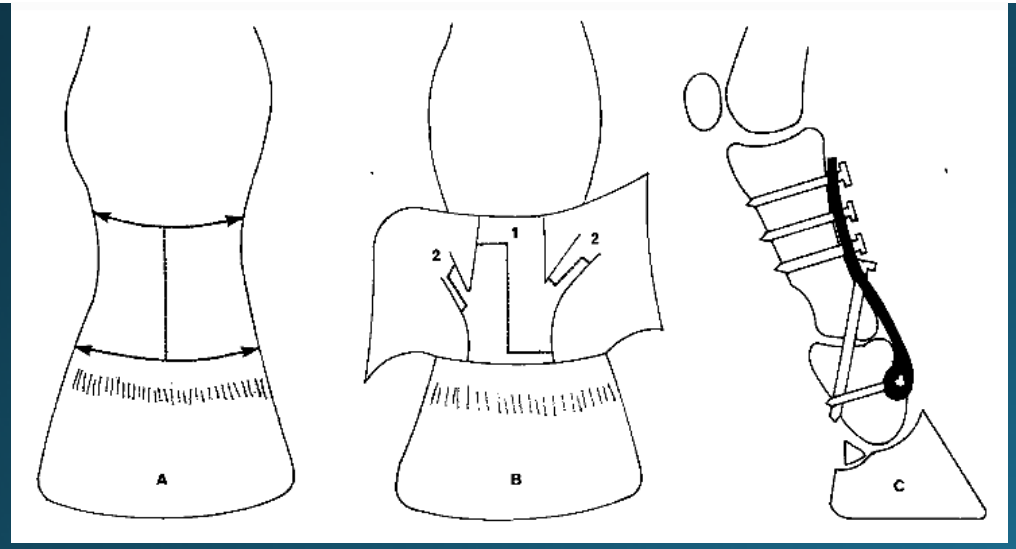
Evaluando las fuentes

- ¿Es una publicación antigua o nueva relevante al tema?

EQUINE VETERINARY JOURNAL 35
Equine vet. J. (1985) 17 (1), 35-40

Arthrodesis of the pastern joint in the horse

M. STEENHAUT, F. VERSCHOOTEN and A. DE MOOR
Large Animal Surgical Clinic, State University, Casinoplein 24, 9000 Ghent, Belgium



Received: 29 September 2020 | Revised: 10 April 2021 | Accepted: 27 May 2021
DOI: 10.1111/evj.13476

ORIGINAL ARTICLE

Equine Veterinary Journal WILEY

Proximal interphalangeal locking compression plate for pastern arthrodesis in horses

Rebecca B. Hicks | Kati G. Glass | Jeffrey P. Watkins

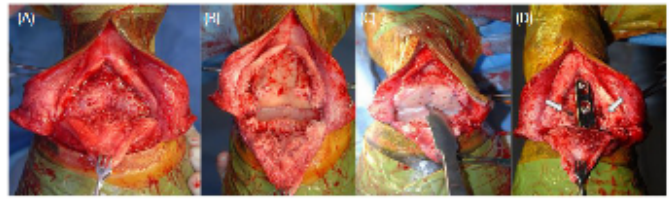


FIGURE 1 (A) An inverted V common or long digital extensor tenotomy with the base near the abaxial margins of the PIPJ; (B) Incision of the dorsal attachments of the pastern joint capsule and the medial and the lateral collateral ligaments for PIPJ dorsal luxation and removal of periarticular articular new bone and as much cartilage as possible from both articular surfaces; (C) Osteosynthesis of both subchondral bone plates and (D) A PIP LCP on the dorsal surface of the PIPJ with two abaxial transarticular lag screws (white arrows)

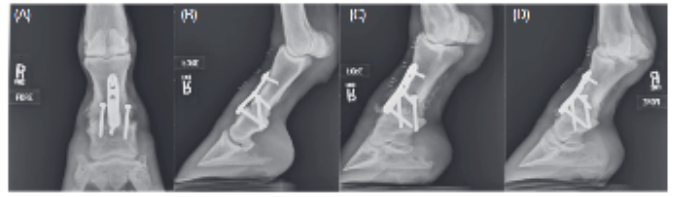


FIGURE 2 Radiographs 2 weeks following PIPJ arthrodesis using the PIP-LCP and abaxial transarticular lag screws: (A) dorsopalmar; (B) lateromedial; (C) dorsomedial palmarolateral oblique and (D) dorsolateral-palmaromedial oblique

J Am Vet Med Assoc. 1988 Aug 1;193(3):353-8.

Slab fractures of the third carpal bone in standardbreds and thoroughbreds: 155 cases (1977–1984)

P R Stephens [1], D W Richardson, P A Spencer

Abstract

Case records and radiographs of 155 horses with third carpal bone (C3) slab fractures were reviewed. Of these cases, race records were obtained for 72 Thoroughbreds and 61 Standardbreds. Three performance criteria were examined: ability to make 1 start, ability to make 10 starts or earn $2,000 (within 1 year of first start after the fracture), and earnings per start. Treatment distribution (lag screw fixation, fragment excision, or rest) was similar in both breeds. Significant differences between breeds were identified in age and sex distributions, fracture displacement, and postinjury performance. In Thoroughbreds, there was a tendency for fractures to occur in the right C3 (59%); in Standardbreds, forelimbs were affected equally. The dorsomedial aspect of C3 was the site of fracture in 87% (135/155) of the cases. Horses referred for treatment were predominantly 2 year old Standardbreds and 3 year old Thoroughbreds. Females of both breeds were less likely to race after injury than males (46 vs 90%). In Standardbreds, all 38 horses with racing starts before fracture were able to race again. Prior racing starts were not related to outcome in Thoroughbreds. The effects of treatment on outcome were not significantly different. Fracture characteristics did not significantly affect outcome, but did influence treatment selection. Convalescent time was not correlated with any of the variables examined (including treatment) or related to outcome; time from admission to first start averaged 11 months. In STandardbreds, 77% of the horses with C3 slab fracture raced after injury; in Thoroughbreds, 65% raced. Earnings per start declined in each breed, but the decline was more pronounced in Thoroughbreds.

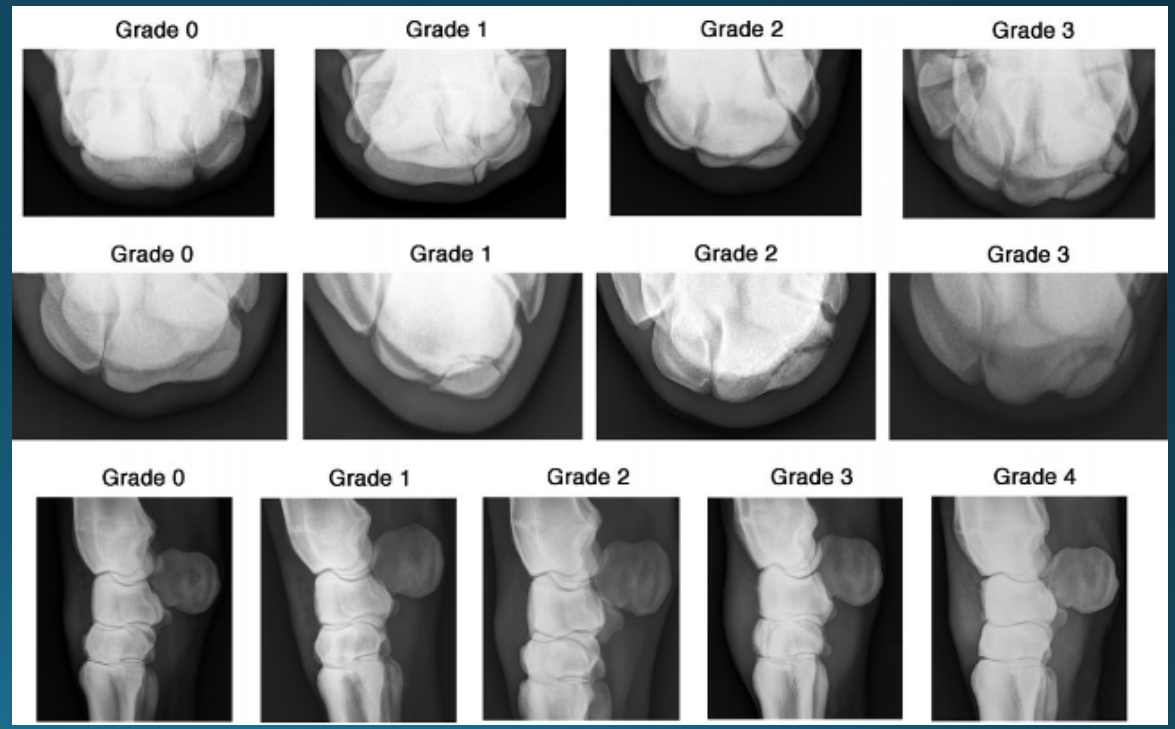
Received: 9 April 2018 | Revised: 14 February 2019 | Accepted: 25 February 2019

DOI: 10.1111/vsu.13193

ORIGINAL ARTICLE - CLINICAL

WILEY

Return to racing after surgical management of third carpal bone slab fractures in thoroughbred and standardbred racehorses



Evaluando las fuentes

- ¿Títulos o credenciales del autor?

Received: 29 September 2020 | Revised: 10 Aprill 2021 | Accepted: 27 May 2021

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ORIGINAL ARTICLE

Equine Veterinary Journal WILEY

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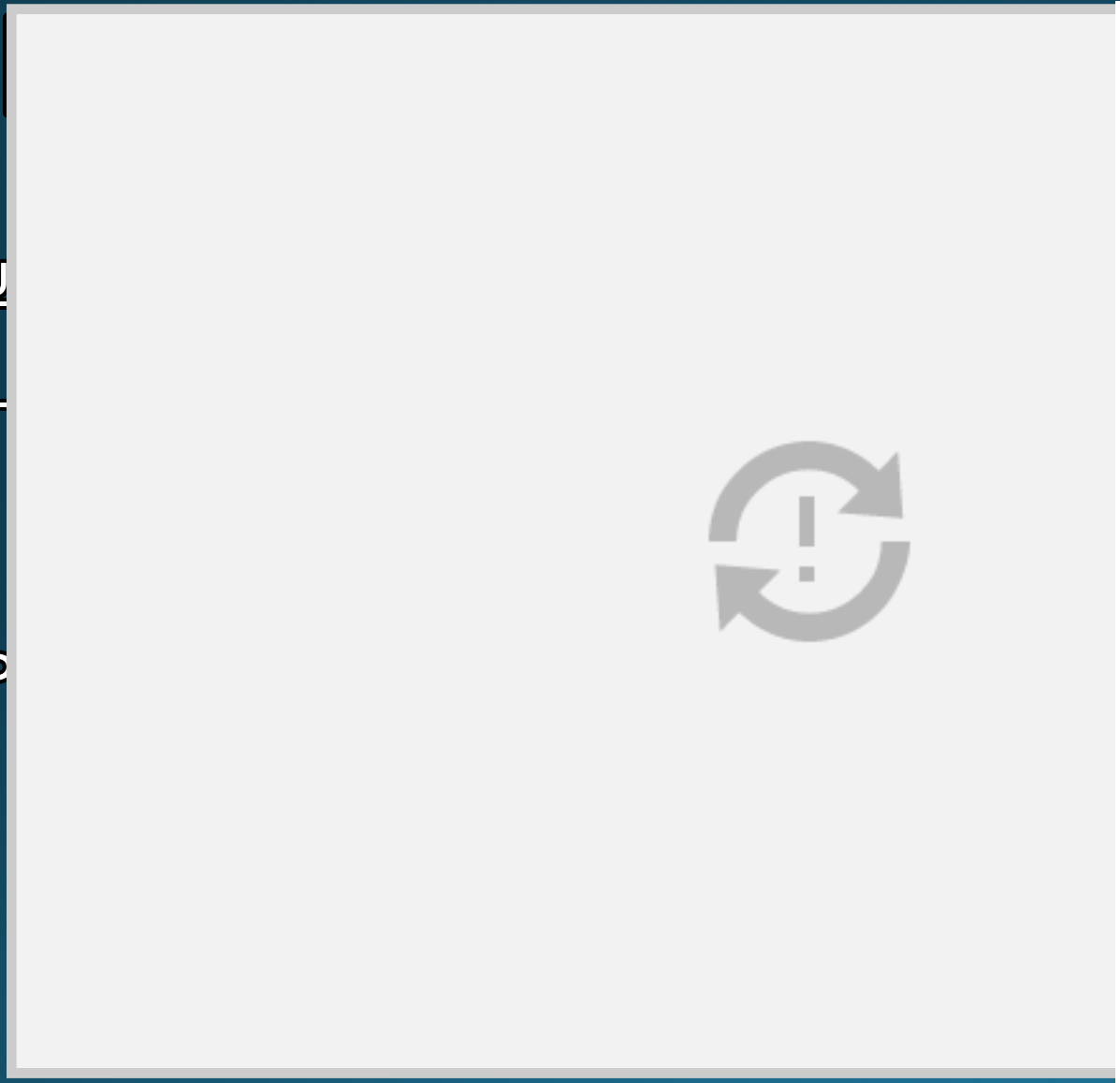
Eva

- ¿Qu
- ¿ El
- ALP



Original Article

Thieme

Arthrodesis of the equine proximal interphalangeal joint: a biomechanical comparison of 2 different LCP systems

Application of an axial locking compression plate and 2 abaxial transarticular cortical screws

Arthrodese des proximalen Interphalangealgelenks beim Pferd: biomechanischer Vergleich von 2 unterschiedlichen LCP-Systemen

Verwendung einer axialen Verriegelungsplatte und zweier abaxialer transartikulärer Kortikalisschrauben

Authors

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Schlüsselwörter

Pferd, Krongelenk, Krongelenkfusion, Osteosynthese, PIP-LCP, ALPS

Key words

Horse, PIP joint, PIP joint fusion, osteosynthesis, PIP plate, ALPS

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Bibliography

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ZUSAMMENFASSUNG

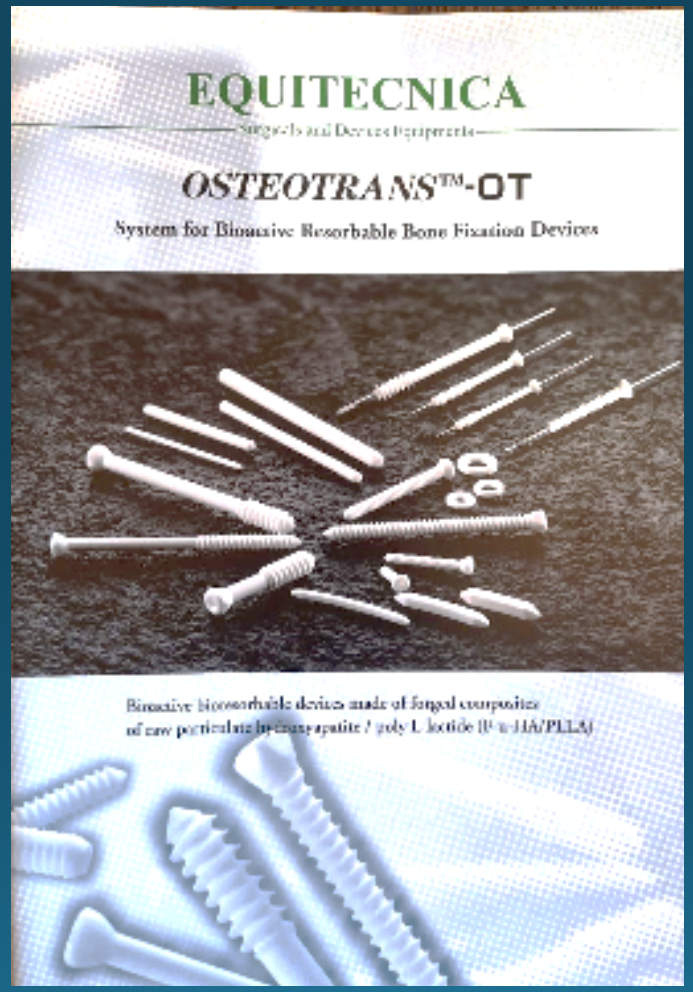
Gegenstand und Ziel Vergleich von mechanischer Stabilität und chirurgischer Handhabung von 2 Verriegelungsplatten-Systemen (ALPS-20, Kyon und PIP-LCP, Synthes) für die Arthrodese des proximalen Interphalangealgelenks beim Pferd.

Material und Methoden Für diese Ex-vivo-Studie standen 6 Beinpaare von adulten Warmblutpferden zur Verfügung, die aus einem nicht orthopädischen Grund euthanasiert wurden. Als chirurgische Technik für die Krongelenksarthrodese wurde eine axial angebrachte Verriegelungsplatte in Kombination mit 2 abaxialen transartikulären 4,5-mm-Kortikalisschrauben gewählt. Zur Fixation der ALPS-20-Platte dienten 3 monokortikal eingesetzte selbstschneidende 6,4-mm-Verriegelungsschrauben mit einer Länge von 28 mm. Die PIP-LCP wurde mit 3 bikortikalen Schrauben implantiert: 2 5,0-mm-Verriegelungsschrauben im proximalen und distalen Plattenloch und eine 4,5-mm-Kortikalisschraube im mittleren Loch. Die mechanische Testung der beiden Präparat-Implantat-Konstrukte erfolgte mit einer servohydraulischen Anlage bei einmaliger uniaxialer Belastung (Testgeschwindigkeit 50 mm/s, Belastungsamplitude 80 mm). Zur Dokumentation der Implantatdeformationen wurden alle Implantate sowohl nach der Implantierung als auch nach der biomechanischen Testung einer CT-Untersuchung auf Deformationen unterzogen. Anhand der resultierenden Belastung-Verlagerung-Kurven wurden Fließpunkt, Steifheit und maximale Belastung für jedes System berechnet. Zur Überprüfung der Messwerte auf statistisch signifikante Unterschiede ($p<0,05$) zwischen den beiden Plattensystemen diente eine einfaktorielle Varianzanalyse (Tukey-Test). Statistische Power ergab sich für die Parameter Fließkraft, Steifheit und maximale Belastung.

Ergebnisse Die mechanischen Eigenschaften der beiden Verriegelungsplatten-Systemen unterschieden sich in Bezug auf Fließpunkt, Steifheit und maximale Belastung statistisch nicht signifikant ($p>0,05$). Bei ALPS-20-Implantaten wurden weder nach der Implantierung noch nach der Testung Deformationen festgestellt. Im Gegensatz dazu zeigten die PIP-LCPs Deformationen in der Längsachse schon zum Zeitpunkt der Implantation, nach dem Festziehen der Schraube im mittleren

Evaluando las fuentes

- ¿Es imparcial y objetivo?



GENERAL ARTICLE

A composite absorbable implant used to treat subchondral bone cysts in 38 horses

Paolo Ravanetti | Antoine Lechartier | Muriel Hamon | Enrica Zucca

Abstract

1 | INTRODUCTION

Evaluando las fuentes

Revisión:

- ¿se cita apropiadamente las referencias?
- ¿Los métodos están bien planteados?
- ¿Los datos son interpretados objetivamente?
- ¿El muestreo es correcto, replicaciones o repeticiones?
- ¿Los datos se someten a diseño estadístico y análisis aplicable?
- ¿Los datos son coherentes con las conclusiones?
- La discusión es objetiva y libre de parcialidad?

Details

ARTICLE

Predicting return to racing after repair of fractures of the metacarpal/metatarsal condyles in Thoroughbred racehorses

Natalie Young, Federico Corletto, Ian Wright

CITE | Check for updates

https://doi.org/10.1111/vsu.13820

Published In Veterinary Surgery

Publisher John Wiley & Sons, Ltd

ISSN 0161-3499

eISSN 1532-950X

43. Goodrich LR, Nixon AJ, Conway JD, Morley PS, Bladon BM, Hogan PM. Dynamic compression plate (DCP) fixation of propagating medial condylar fractures of the third metacarpal/metatarsal bone in 30 racehorses: retrospective analysis (1990-2005). *Equine Vet J*. 2014;46(6):695-700. doi:10.1111/evj.12184 Epub 2014 Jan 7. PMID: 24028774.

How to cite this article: Young N, Corletto F, Wright I. Predicting return to racing after repair of fractures of the metacarpal/metatarsal condyles in Thoroughbred racehorses. *Veterinary Surgery*. 2022; 51(5):753-762. doi:10.1111/vsu.13820

Internet

- ¿Es la Web una buena herramienta de investigación? SI, PERO
- Es más que solo saber cómo buscar en Google.

Sugerencias:

1) Asegúrate de estar en el lugar correcto.

2) Ante la duda, duda.

3) Considerar la fuente.

4) Mira los detalles.

Internet

- Criterio
  - Autoridad o experiencia de los autores
  - Información precisa
  - Objetividad
  - Actualidad –ver última actualización de la web
  - Cobertura (¿habla del tema de interés?)
  - Valor (información original, ¿útil?, gramática, ¿errores de tipeo?)

Encontrando la literatura

- Conocer las fuentes de información
  - Libros
  - Monografías
  - Proceedings
  - Journals
  - Disertaciones
  - Patentes
  - Boletines
  - Reportes

Encontrando la literatura

- Formatos
  - Papel
  - **Electrónico**
  - **Video (AO, youtube)**

BRINKER, PIERMATTEI, AND FLO'S HANDBOOK OF SMALL ANIMAL ORTHOPEDICS AND FRACTURE REPAIR, FIFTH EDITION

Interlocking Nail

Interlocking nail systems are available with 4.0, 4.7, 6.0, and 8.0 mm-diameter nails, with standard two holes proximal and distal for the locking screws or bolts (Innovative Animal

Products, Rochester, Minn.) and 6.0, 7.0, and 8.0 mm diameter nails (BioMedtrix, Boonton, N.J.). Each diameter size comes in different lengths. The interlocking nails have either trocar, blunted, or bullet nose points. IM pins of smaller diameter and various reaming devices are used first to open the medullary canal. Fracture reduction is accomplished through a limited surgical or minimally invasive approach, and the interlocking nail is then driven into the IM space with technique similar to the IM pin. Each nail has a machined joint proximally that allows attachment of an extension to the drill guide jig (see Figures 2-52, *E* and 2-56, *A*). Nail length is therefore an important issue for preoperative planning, since cutting off the jointed end is not desirable. The location and number of the interlocking holes in relation to the fracture are also important preoperative considerations. Templates are available for onlay to the radiographs and to facilitate proper choices in preoperative planning. Once the drill guide jig is attached to the pin extension, drill guide inserts and sleeves are used through the jig to position the locking bolts or screws properly in the nail holes. The jig is fairly effective at blind location of the nail holes, with one report indicating only a 4% prevalence of misdirected screws.[76]

CERCLAGE WIRE

The term cerclage means "to encircle" or "to wrap into a bundle." This procedure refers to a flexible wire that completely (see Figure 2-57, *H*) or partially (see Figure 2-57, *I*) passes around the circumference of a bone and is then tightened to provide static interfragmentary

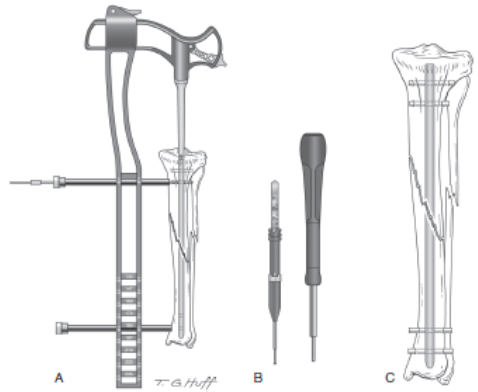


FIGURE 2-54. Angle stable interlocking nail, (I-loc, BioMedtrix, Boonton, N.J.). **A,** Drill jig for placing bolts through the bone and pin. **B,** Measuring tool and placement tool for the interlocking bolt. **C,** Bolts are firmly fixed to the nail hole with no slack or rotational instability.

Encontrando la literatura

- Decidir dónde buscar
  - Bases de datos electrónicas
    - Indexan abstracts y algunos trabajos completos
    - Eficiente
    - Fácil acceso
  - Bases de datos en papel (Bibliotecas)
    - Índices o index que cubren títulos de trabajos de muchos años atrás
    - Posiblemente haya que recurrir a más de una biblioteca
      - Acceso y búsqueda por medios de catálogos y listas online
      - Pedir el trabajo requerido recientes o antiguos (escaneados)
      - Asistencia en estrategias de búsqueda

Evaluando las fuentes

- Fuente electrónica:
- ¿Quién es el responsable de la publicación?
- ¿Links a otras fuentes confiables?
- ¿Qué domino se usa para el acceso? edu, org, gov

- https://www.thesprucepets.com/what-locked-stifles-look-like-1886426
- https://avmajournals.avma.org/view/journals/javma/javma-overview.xml

Evaluando las fuentes

- Comunicaciones personales

- Equine Surgery 5th ed
  Auer, Stick

Figure 77-9. Synthes Large Fragment Set: Instruments. The set contains all the drill bits, taps, drill guides, screwdrivers (hexagonal and stardrive), T-handle, countersink, depth gauge, push-pull device, tension device, socket wrench, and torque-limiting device that are needed to insert screws (in lag fashion) into bone as well as through DCPs, LC-DCPs, and LCPs. The instruments are arranged in three trays that fit on top of each other into the main tray. Pictographs facilitate correct positioning of each instrument into the trays. (Courtesy DePuySynthes Vet, West Chester, Pennsylvania.)

cannulated screw contains a self-drilling and self-tapping tip, as well as a reverse-cutting device at the back end of the threads (Figure 77-10).[44] An *in vitro* study using equine cadaveric femurs revealed that the 6.5-mm cancellous and the 7.3-mm cannulated screws vary in insertion properties (the 7.3-mm cannulated screw requires significantly greater insertion torques), but they have similar pullout properties in the mid, proximal, and distal metaphyses of foal femurs.[44] The cannulated screw is weaker in bending and cyclic loading than standard cortex screws because of the central canal (Richardson D, Personal communication, AOVET Advanced Equine Course, Columbus, 2017). Both screw types have greater holding power at the mid-diaphyseal location than at metaphyseal locations. Because of the overall similar holding power of 6.5-mm cancellous and 7.3-mm cannulated screws, it is unlikely that increasing the screw diameter beyond 6.5 mm will provide increased holding power in foal bones. The use of the 7.3-mm cannulated screw should be considered for foal femoral capital fracture repair when greater accuracy is needed or when bone threads for the 6.5-mm cancellous screw have been stripped.[36]

Self-tapping cortex screws contain the same thread-cutting device at the tip as the tap, obviating one step of the standard screw-insertion technique (see Table 77-1).[45] These screws are popular in human surgery and are gaining more and more acceptance in

Figure 77-10. Schematic drawing of a 7.3-mm cannulated screw with the guide pin inserted and half of the shaft removed. *Insert:* the reverse-cutting design of threads, which facilitates screw removal after healing of the fracture.

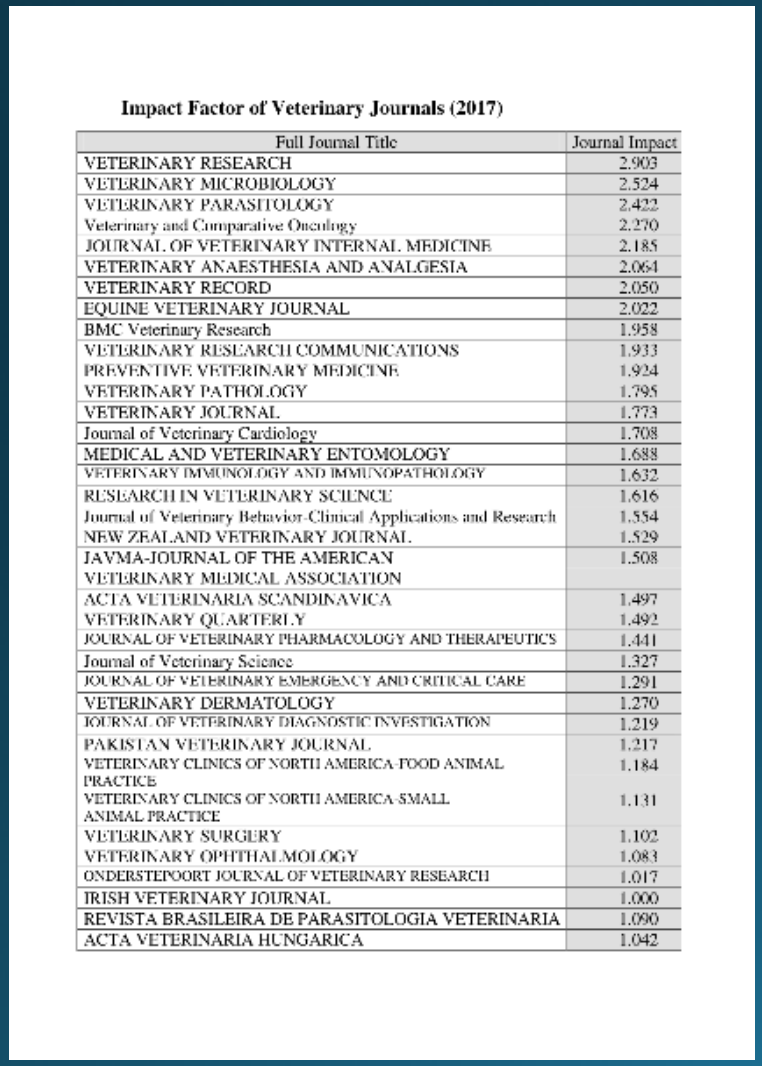
half the total insertion time required by standard screws.[47] Interestingly, bone failure and bone fragmentation during the pullout tests were more commonly associated with self-tapping screws.[47]

Locking head screws were introduced with the less-invasive stabilization system (LISS) and subsequently also applied in the locking compression plates (LCP) by Synthes (Figure 77-11). The conical shape of the PC-Fix screw (which is no longer manufactured) served as a basis for the new design.[48] The screw head was modified with a double-threaded profile (the two thread spirals start 180 degrees apart when observed from the top of the screw head), which complemented the one in the LISS plate hole. This design provides stable angular fixation of the screw-plate (fixator) junction: the screw head is self-centering in the hole, and it keeps the screw from backing out of the LCP fixator (see later). The pitch of the threads at the screw head is identical to that of the threads on the shaft. Because of the larger diameter of the screw head, the pitch seems smaller than on the shaft. However, the threads on the screw head catch after turning only 180 degrees instead of 360 degrees in the shaft. This facilitates

Factor de impacto

- Mide la repercusión de una revista en la comunidad científica.
  - Compara revistas y evalúa la importancia relativa de una revista concreta dentro de un mismo campo científico
  - Es el número de veces que se cita por término medio un artículo publicado en dicha revista.

Factor de impacto



Impact Factor of Veterinary Journals (2017)

Full Journal Title	Journal Impact
VETERINARY RESEARCH	2.903
VETERINARY MICROBIOLOGY	2.524
VETERINARY PARASITOLOGY	2.422
Veterinary and Comparative Oncology	2.270
JOURNAL OF VETERINARY INTERNAL MEDICINE	2.185
VETERINARY ANAESTHESIA AND ANALGESIA	2.064
VETERINARY RECORD	2.050
EQUINE VETERINARY JOURNAL	2.022
BMC Veterinary Research	1.958
VETERINARY RESEARCH COMMUNICATIONS	1.933
PREVENTIVE VETERINARY MEDICINE	1.924
VETERINARY PATHOLOGY	1.795
VETERINARY JOURNAL	1.773
Journal of Veterinary Cardiology	1.708
MEDICAL AND VETERINARY ENTOMOLOGY	1.688
VETERINARY IMMUNOLOGY AND IMMUNOPATHOLOGY	1.632
RESEARCH IN VETERINARY SCIENCE	1.616
Journal of Veterinary Behavior-Clinical Applications and Research	1.554
NEW ZEALAND VETERINARY JOURNAL	1.529
JAVMA-JOURNAL OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION	1.508
ACTA VETERINARIA SCANDINAVICA	1.497
VETERINARY QUARTERLY	1.492
JOURNAL OF VETERINARY PHARMACOLOGY AND THERAPEUTICS	1.441
Journal of Veterinary Science	1.327
JOURNAL OF VETERINARY EMERGENCY AND CRITICAL CARE	1.291
VETERINARY DERMATOLOGY	1.270
JOURNAL OF VETERINARY DIAGNOSTIC INVESTIGATION	1.219
PAKISTAN VETERINARY JOURNAL	1.217
VETERINARY CLINICS OF NORTH AMERICA-FOOD ANIMAL PRACTICE	1.184
VETERINARY CLINICS OF NORTH AMERICA-SMALL ANIMAL PRACTICE	1.131
VETERINARY SURGERY	1.102
VETERINARY OPHTHALMOLOGY	1.083
ONDERSTEPOORT JOURNAL OF VETERINARY RESEARCH	1.017
IRISH VETERINARY JOURNAL	1.000
REVISTA BRASILEIRA DE PARASITOLOGIA VETERINARIA	1.090
ACTA VETERINARIA HUNGARICA	1.042

https://impactfactorforjournal.com/jcr-impact-factor-2022/

Búsqueda

- Sitios
  - **Pubmed**
  - Science Direct
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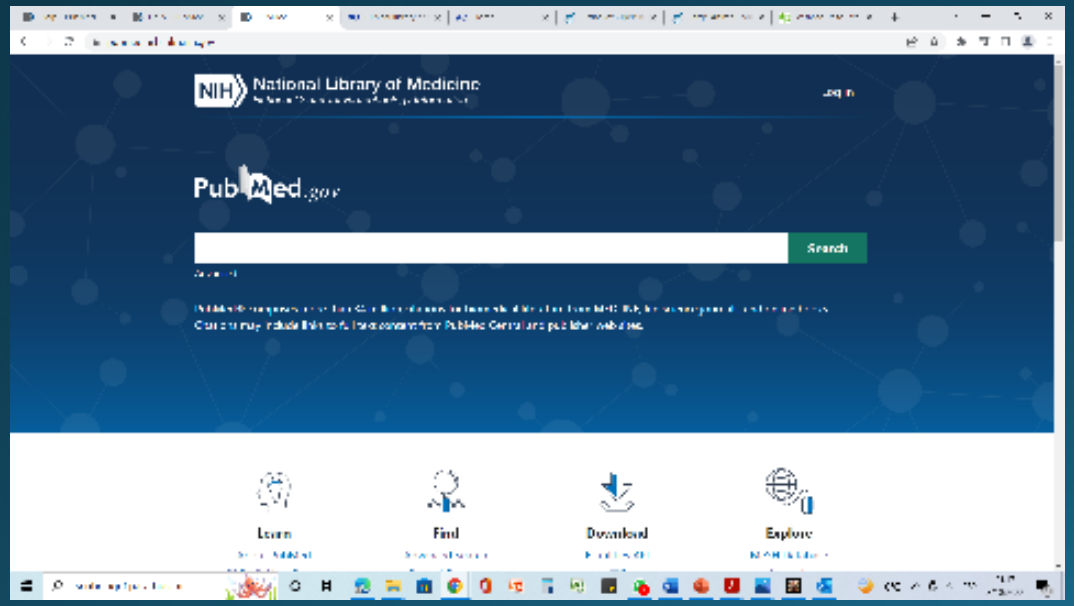
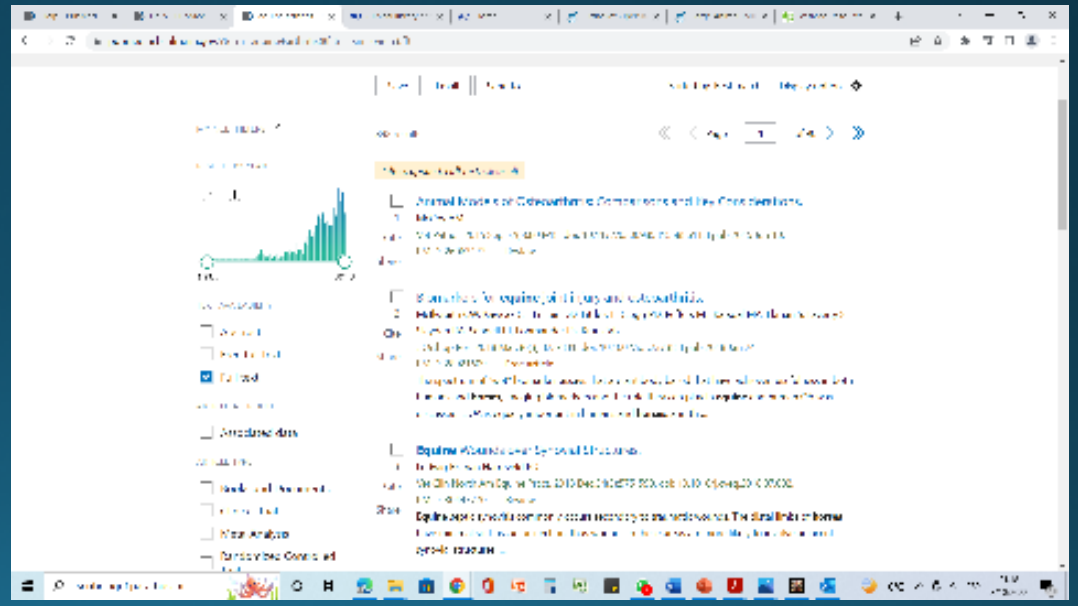
  - Google
  - Researchgate.net https://www.researchgate.net/publication/249648440_Surgical_treatment_of_distal_tarsal_joint_luxations_in_three_horses/citations?latestCitations=PB:358716336,PB:358716160
  - Editoriales (Elsevier, Sounders, etc.)
  - Journals (Javma, JAVR, Veterinary Surgery, Vet. Clinics)
  - https://www.worldcat.org/es

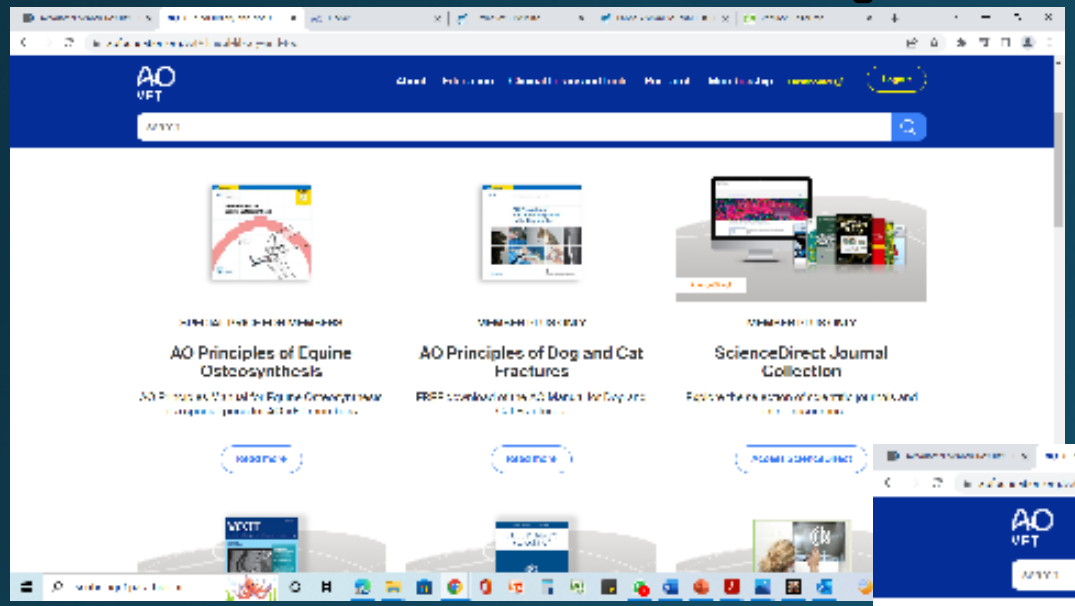
https://pubmed.ncbi.nlm.nih.gov/

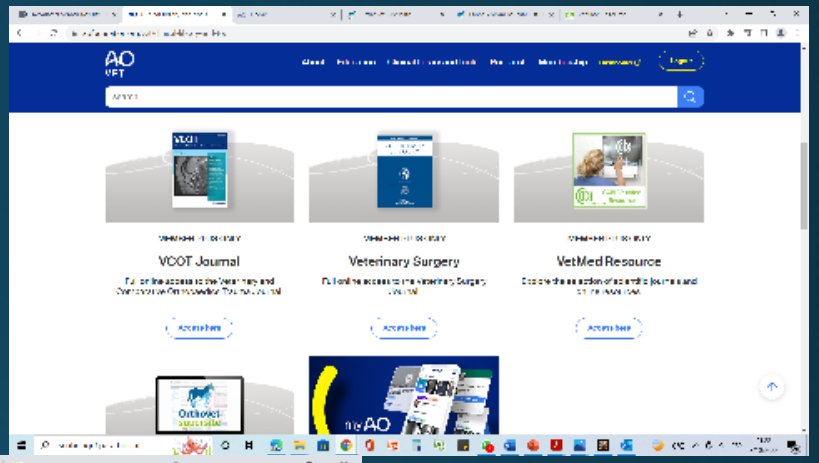
Búsqueda básica

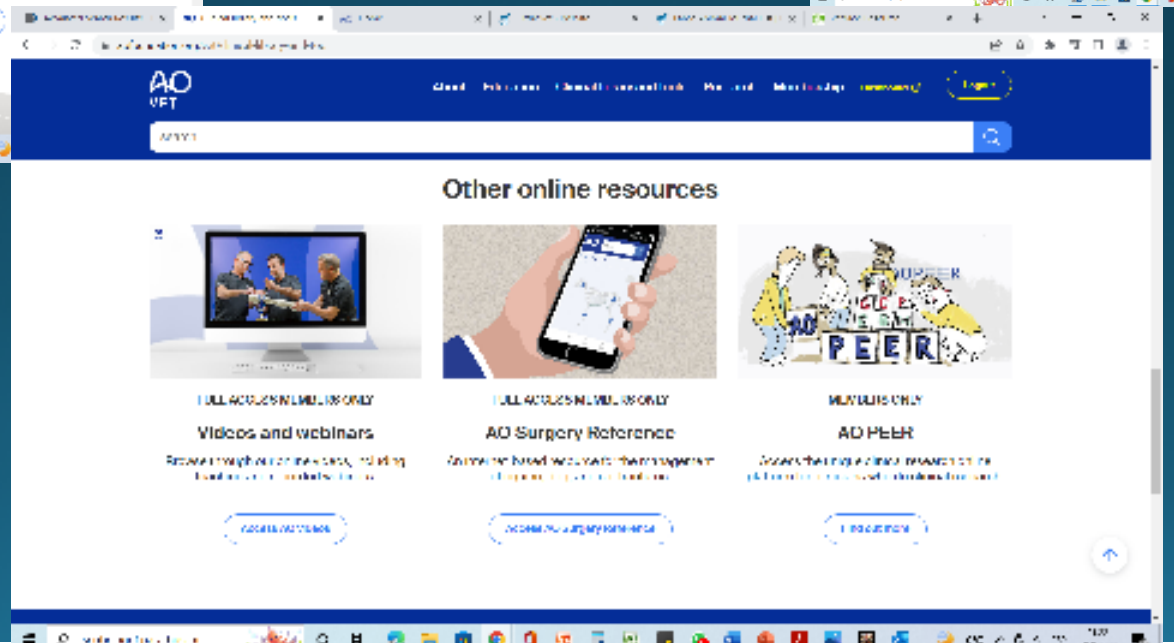




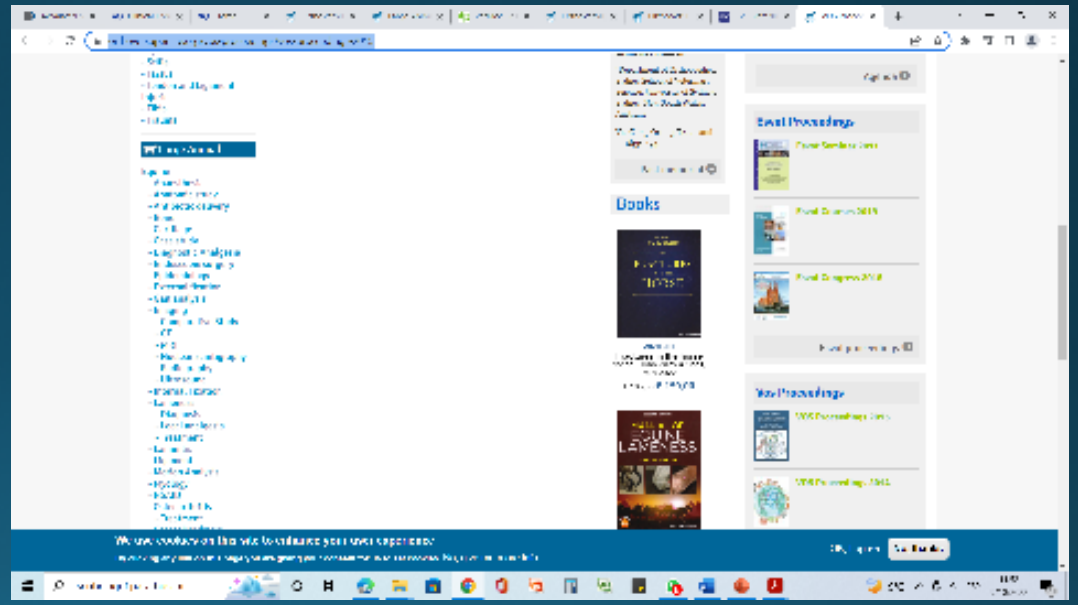
https://www.aofoundation.org/vet/clinical-library-and-tools







https://www.orthovetsupersite.org/



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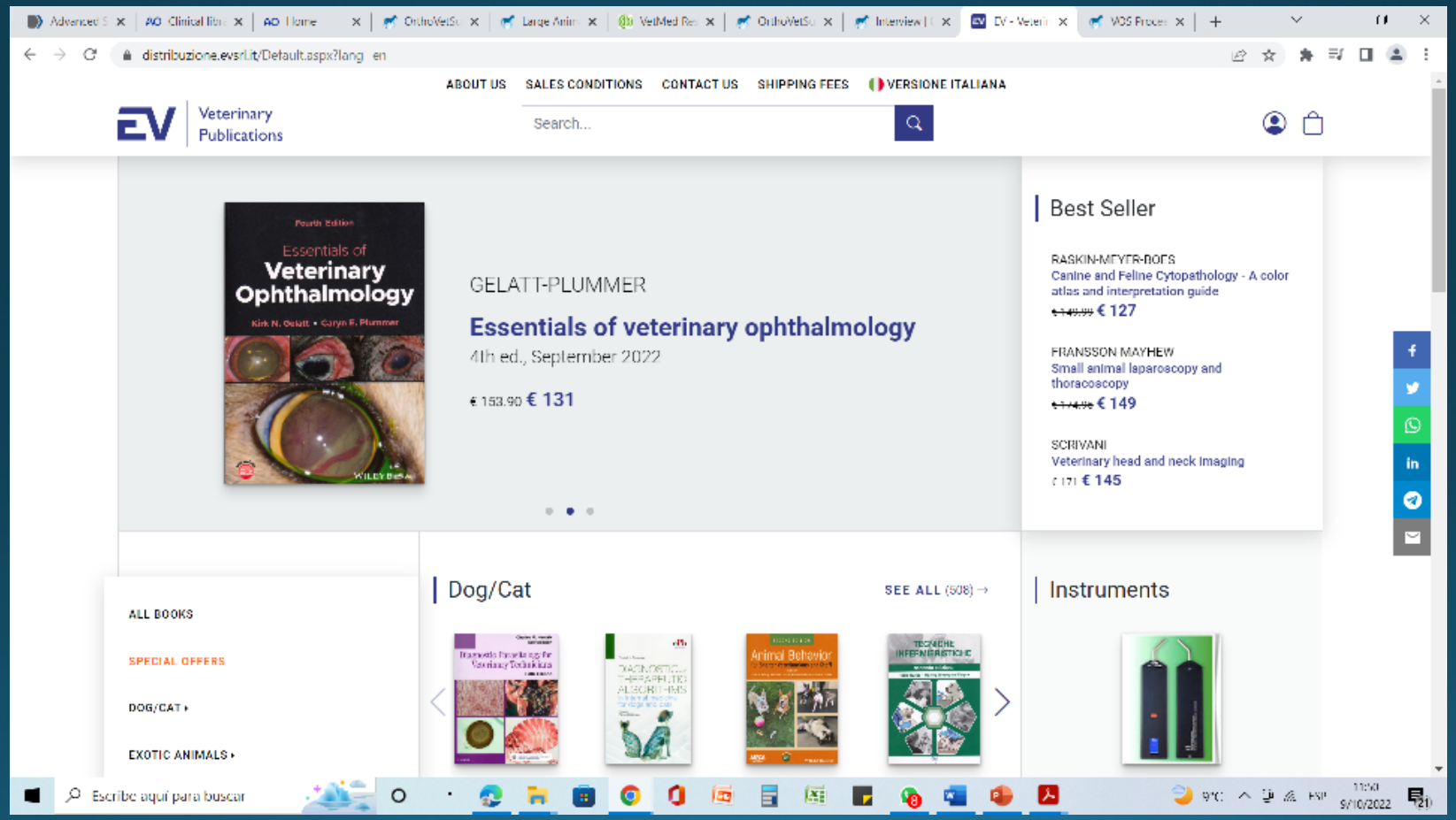
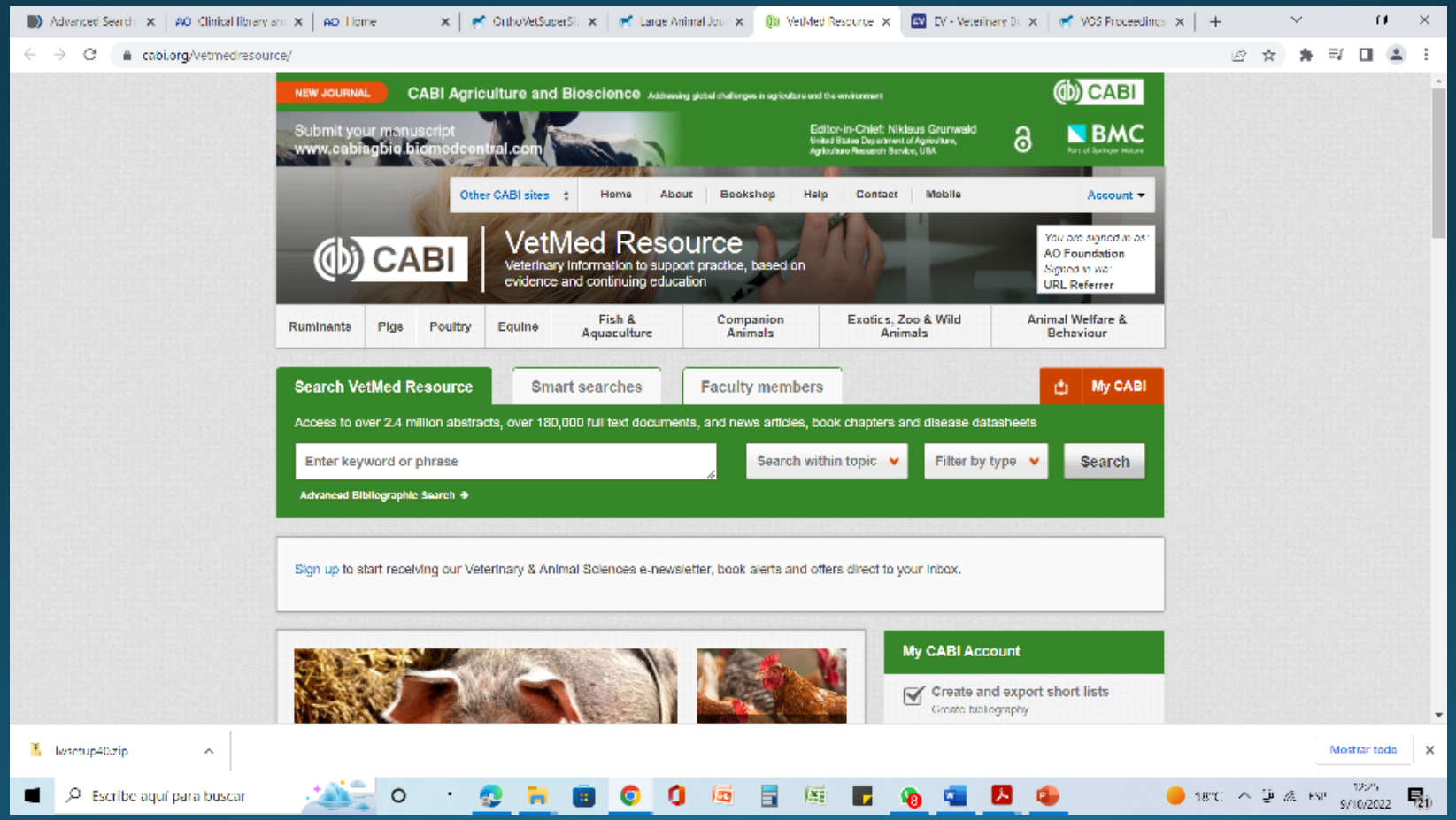
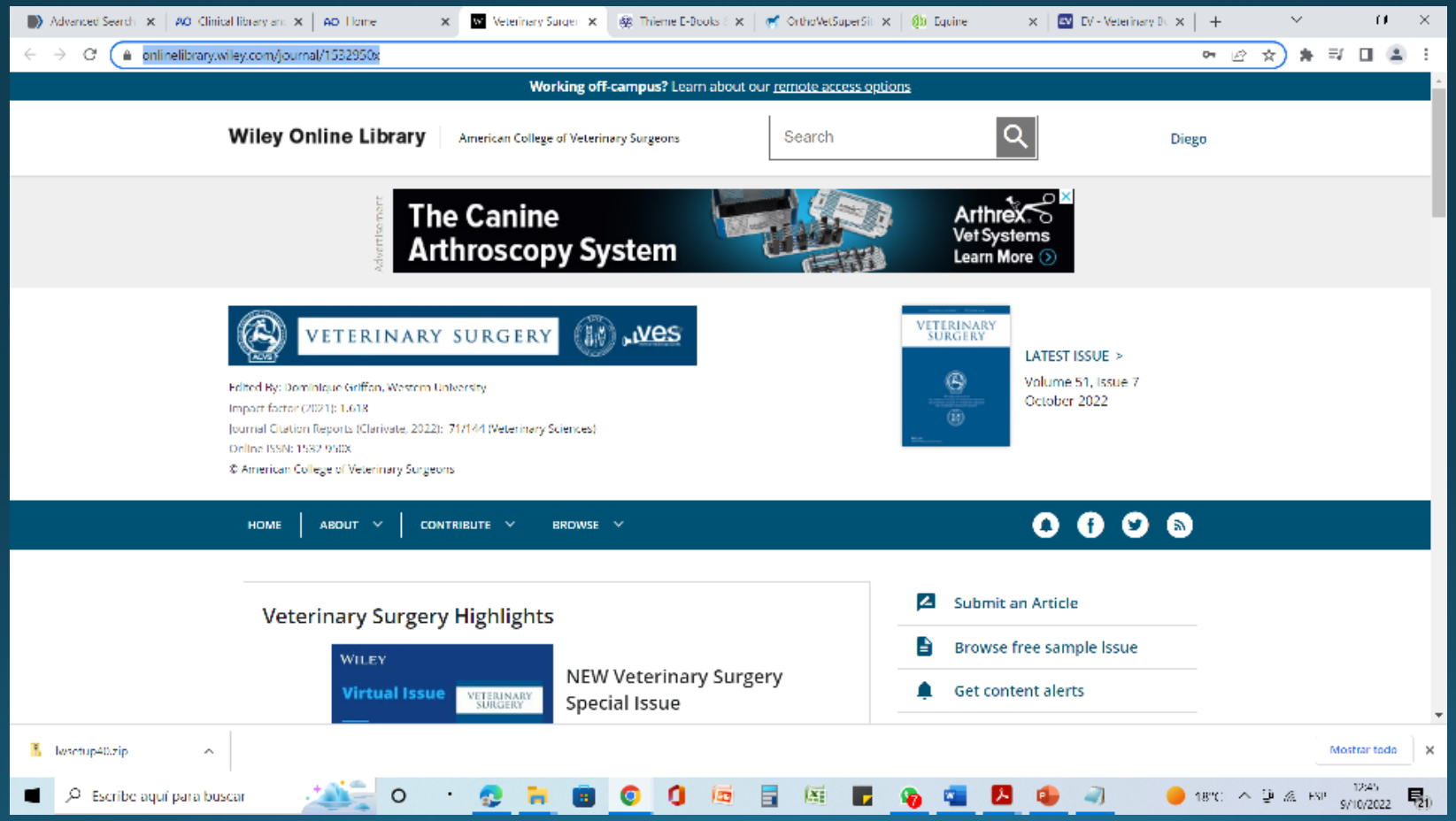


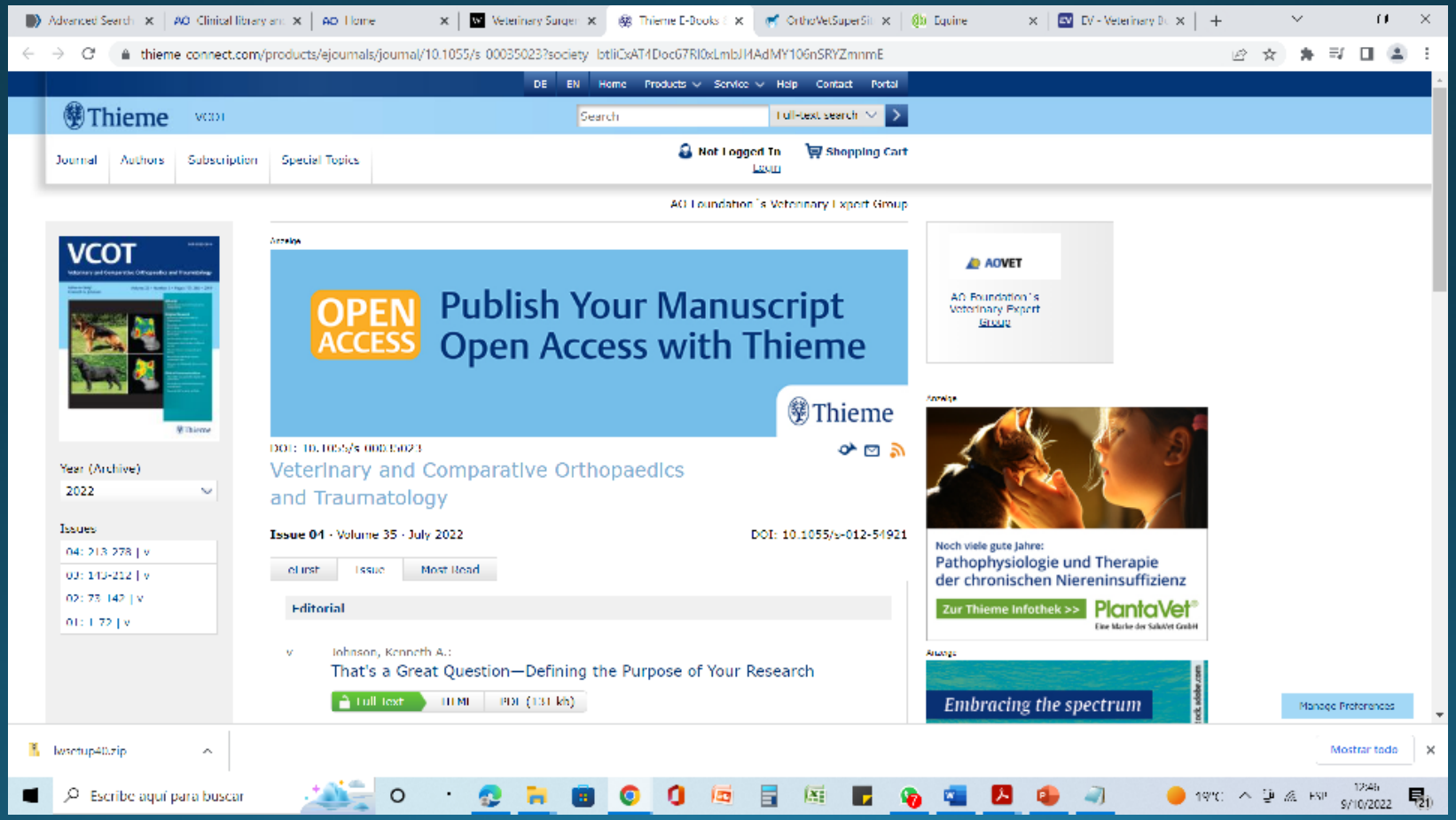
https://www.cabi.org/vetmedresource/



https://onlinelibrary.wiley.com/journal/1532950x

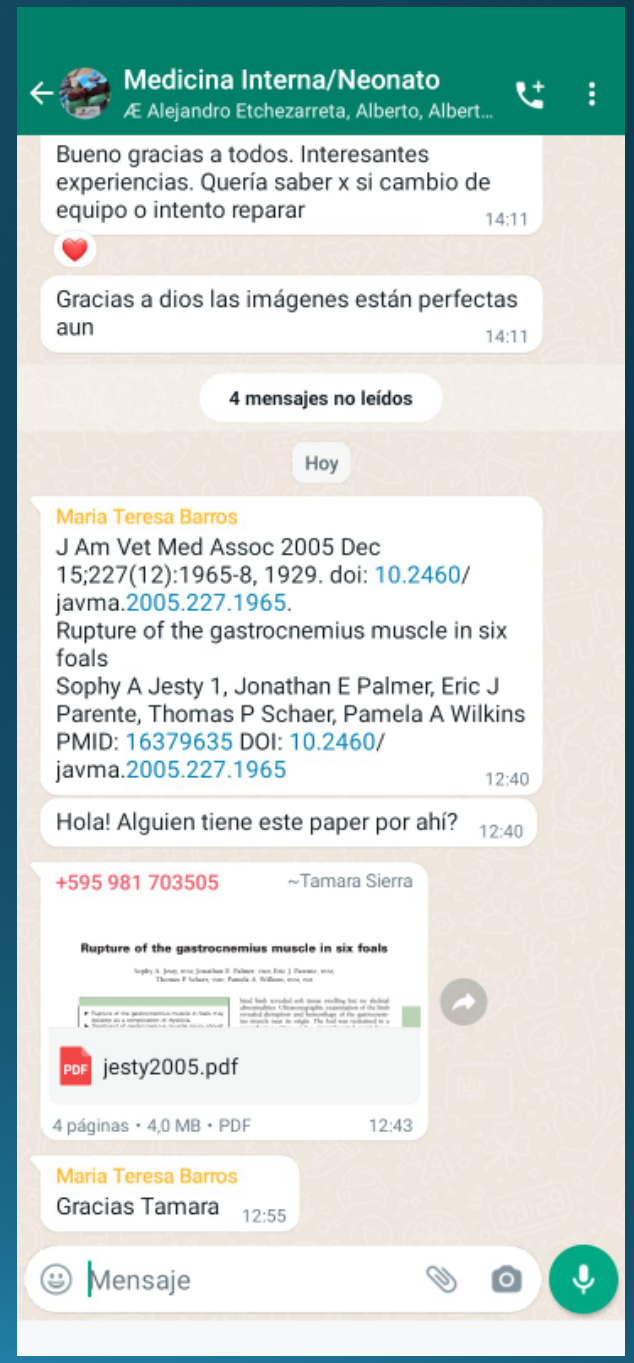


https://www.thiemeconnect.com/products/ejournals/journal/10.1055/s00035023?society=btIiCxAT4Doc67RIoxLmbJI4AdMY106nSRYZmnmE



https://www.worldcat.org/es

Grupos de whatsapp



Conclusiones

- Debemos tener bien claro que estamos buscando
- Ser sistemáticos en nuestra búsqueda y organizar la información
- Evaluar las fuentes
- Evaluar los artículos


Gracias!!