THE CONGENITAL DISCOID MENISCUS

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Thirteen hundred meniscectomies, performed in the seven-year period 1941–48, included twenty-nine congenital discoid menisci. Each specimen was photographed, preserved, and annotated, together with relative clinical data. The material thus available for investigation, by comparison with any personal series hitherto described, presents a unique opportunity for the study of an interesting anomaly of development. In this article the anatomical and pathological features will be described, the lesions classified, and certain conclusions drawn. It is not proposed to discuss the comparative anatomy of the menisci or the development of the knee joint. That the menisci exist as cartilaginous discs at an early stage of development, and that the congenital discoid meniscus is due to occasional persistence of the foetal state, is not in question.

Classification—Study of the specimens suggests that three types of congenital abnormality may be recognised, each with distinctive features, and each susceptible to characteristic injuries corresponding to the anatomical type. The classification is of course arbitrary; the types represent no more than stages of arrest of a natural process of development, and infinite variations are possible. The two extremes, “gross abnormality” and “approaching normal,” have been called—1) primitive, and 3) infantile; a type somewhere between is described as—2) intermediate.

THE PRIMITIVE DISC

If it is accepted that the shape of a normal meniscus is the result of gradual absorption during the latter half of foetal life of the central part of an originally complete plate, then it is reasonable to suggest that the more complete the disc, and the greater its breadth and thickness, the earlier the absorptive process must have ceased. The distinctive feature of the primitive disc is not so much its size, which varies within wide limits according to the age, sex, and build of the patient, but the lack of any suggestion that it was ever intended to be a meniscus (Fig. 1). The whole area where there is normally contact between the femur and tibia is filled in; so that, not only is there no point of direct contact between the bones but, the opposing articular surfaces are actively separated by fibrocartilage of a thickness which may be as great as 6 millimetres. The central free margin is thick; it is the shortest of all three types and it stretches almost directly between the anterior and posterior central attachments. The outline of the edge varies in form. It is often convex with a small notch at each extremity.

Measurement of the thickness of primitive discs—It has generally been assumed that the periphery of a congenital disc is thicker than that of the normal structure. In order to learn whether or not this assumption was correct, and if so, whether it applied to all three types, each specimen was measured at the deepest point in the middle segment. Of fifteen primitive discs, the thickest measured 9.75 millimetres, the thinnest 4.5 millimetres, and the average 7.6 millimetres. To compare these figures with the normal, thirty non-discoid lateral menisci, the subject of a variety of different tears, were taken at random; the depth of the periphery was measured at the same point. The thickest measured 10.5 millimetres, the thinnest 5.5 millimetres, and the average 7.5 millimetres.

In the primitive disc, unlike other varieties of disc and the normal meniscus, the depth of the free central margin is of measurable thickness. In the twelve specimens in which it

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was undamaged the greatest depth recorded was 6 millimetres, the least 2.5 millimetres, and the average 3.5 millimetres. It should be noted that these measurements were made on preserved specimens in which the degree of shrinkage during preservation is unknown, so that they must not be accepted as accurate measurements of menisci in the normal state. They are, however, comparable with each other, and it is clear that there is no less wide

FIG. 1

FIG. 2

FIG. 3

Three types of congenital discoid meniscus.

The primitive type (Fig. 1) shows a complete disc without any suggestion that it was ever intended to be a meniscus; the central zone and the short free central margin are thick. *The intermediate type* (Fig. 2) is less massive and less complete; it is thinner, to the point of transparency in the central zone. *The infantile type* (Fig. 3) approaches the normal, differing in the greatly increased breadth of the middle segment.

variation in the depth of the peripheral rim of primitive discs than in normal lateral menisci. Primitive discs do, of course, occur with a periphery which is thicker than the normal, but the average thickness of a number of specimens is no greater than that of a similar number of normal lateral menisci. The comparative increase of thickness of primitive discs applies to the central unabsorbed portion, and especially to the free margin, but not to the periphery.

Injuries of the primitive disc—As might be expected, injuries of congenital discs are more extensive and more unusual in the thick and complete primitive types than in those which more closely resemble the normal structure. The thick central part of these discs, being interposed between the femoral and tibial condyles, is subject to direct compression, as well as to the antero-posterior and rotatory strains to which the normal meniscus is subject. The lesions correspond to the strains imposed, namely: 1) horizontal cleavage, resulting directly from the thickness and completeness of the disc; and 2) longitudinal and transverse tears such as may be sustained by any lateral meniscus.

Horizontal cleavage—Splitting of the fibrocartilage in its transverse or narrow axis may occur in the normally shaped adult meniscus in several ways, for example: when the centrally displaced part of a longitudinal tear rotates in its long axis and is trapped between the condyles; or when two opposing edges of a tear impinge on one another, as in the incomplete transverse tear of the lateral meniscus which has been described elsewhere (Smillie 1946); or in a joint in which the accessory supporting structures are so lax that the meniscus can rotate in its long axis. None of these mechanisms can apply in the case of congenital discs. The horizontal split is due to continuous movement of the superior on the inferior surfaces. While the superior surface claims the normal accessory relationship to the moving femoral condyle, the inferior surface is fixed, relatively firmly, to the tibial head (Fig. 4a). Continuous flexion and extension movement, aided by rotatory movement, lead to a horizontal line of cleavage between the two surfaces (Fig. 4b). That this explanation is correct is proved by specimens in which there is a space between the superior and inferior surfaces, extending throughout a large part of the total area of the structure, and yet in which external examination reveals no sign of injury in either surface. The appearance is that of an empty cystic space within the substance of the fibrocartilage (Fig. 5). This is the earliest manifestation of a lesion which, with the passage of time, becomes greatly modified by further wear and tear.

Longitudinal tears—Transverse tears of a primitive disc, complete or incomplete, are impossible; there is no concave margin to be stretched and torn. Longitudinal tears, however, are common. They are located usually on the inferior surface, closer to the central than to the peripheral margin. In none of the longitudinal tears of primitive discs were both surfaces divided. In this respect they differ from the longitudinal tears of ordinary menisci, and from those of the intermediate type to be described later. The penetration of one surface does, of course, produce an outside entrance to the plane of horizontal cleavage (Figs. 6 and 14).

Attenuation of the inferior surface of the disc—Continuation of the stresses which cause horizontal cleavage gives rise to gradual destruction of the fibrocartilage until a time is reached when the inferior surface is so attenuated that it is worn away (Fig. 4c). The under-surface of such a specimen shows the original horizontal split clearly defined at the margins of the crater which has been produced (Fig. 7A). At this stage, contact between the condyles is prevented only by the thin superior surface of the disc. Judging by the number of specimens which show this particular feature, the thin membrane of this superior surface appears to be resistant to further destruction for some considerable time.

Central hole in the disc—In the last stage both inferior and superior surfaces are so worn

FIG. 4

Diagrammatic representation of the stages of horizontal cleavage: a) the superior and inferior surfaces shift in relation to one another; b) a line of cleavage appears; c) the inferior surface wears away; d) wearing of both surfaces causes a central hole.

FIG. 5

FIG. 6

FIG. 7A

FIG. 7B

FIG. 8A

FIG. 8B

Horizontal cleavage in the primitive disc.

In the specimen shown in Fig. 5 both surfaces are intact but a line of cleavage has appeared within the substance of the fibrocartilage; it is outlined by lead shot introduced through a slit cut in the periphery (photograph with transmitted light). Fig. 6 shows a specimen in which a short longitudinal tear has occurred on the superior surface, entering the line of cleavage. The specimen in Fig. 7A shows wearing of the inferior surface permitting the femoral condyle to sink into the meniscus; the superior surface of the same meniscus shows the facet produced by the condyle (Fig. 7B). The specimen in Fig. 8 shows wearing of both surfaces producing a central hole; the inferior surface shows the original line of cleavage at the margins of the hole (Fig. 8A).

away that there is a hole in the centre of the specimen (Fig. 4d). The original line of cleavage can still be seen at the margins of the hole (Fig. 8A).

Summary of the four types of injury of primitive discs—The various stages of the lesion, and the frequency of each stage in this series, may be summarised thus: 1) a plane of cleavage appears in the substance of the fibrocartilage between the undamaged superior and inferior surfaces (two cases); 2) longitudinal tears are superimposed, usually on the inferior aspect (four cases); 3) the inferior surface is worn away and a shallow crater is produced (six cases); 4) both inferior and superior surfaces are worn away, thus producing a hole in the centre of the disc (two cases).

Ridges on the surface of a primitive disc—Other writers have drawn attention to the presence of a ridge on the superior surface of certain specimens and have discussed the relationship of this ridge to the "snapping knee." This ridge, or wave, is said to have arisen in consequence of weight-bearing but no precise information has been offered as to the mode of origin. Ridges of sufficient degree to account for "snapping knee" were noted in two specimens in this series. The position varies. When there is a single ridge, it runs obliquely forwards and outwards from the free central margin to the periphery, and it marks the division between a posterior facet where the femoral condyle lies in flexion, and an anterior facet where the condyle lies in extension. When only one recognisable facet is present, two ridges may exist, one in front and one behind the point occupied by the femur. The question arises as to whether this ridge is elevated above the natural level of the original structure, heaped up by the action of weight-bearing as has been hinted in previous descriptions, or whether there is some more simple explanation. Measurements of the ridge, both at the periphery and at the central margin, show that it is no higher than the original structure. The explanation is afforded by the pathological changes in primitive discs already described. These ridges are due to wearing of the inferior surface which allows the superior surface to sink, so that eventually a smooth hollow is produced for reception of the femoral condyle (Fig. 7A). The ridges are no more than intact strips of fibrocartilage. Moreover, and in further evidence that this explanation is correct, they do not necessarily run transversely in the short axis of the disc. Two parallel ridges of comparable height may sometimes be seen in the long axis of a thick specimen. The significance is the same; they simply outline the medial and lateral borders of a depression produced by the femoral condyle.

Cause of the "snapping knee"—In this series there were only four cases in which a congenital discoïd meniscus was associated with the dramatic sign of "snapping knee" (see Table I). The writer has also had the opportunity of examining three other cases, two described by Middleton (1936), and one seen before 1940 and not included in this series. The snap occurs as the result of sudden alteration in the usual relationship between the meniscus and the femoral and tibial condyles, the actual sound being produced by backward or forward movement of the meniscus at the moment that the femoral condyle rides over: 1) the thick intact strip of fibrocartilage which forms the anterior boundary of the facet produced by the femoral condyle; or 2) the thick anterior peripheral margin of the meniscus itself.

FIG. 9

The cause of "snapping knee"
—A) relation of femoral condyle to the ridge in flexion; B) relation of femoral condyle in extension; C) the condyle has slipped over the anterior margin of a small disc lying horizontally in the posterior compartment; D) the condyle has slipped over the anterior margin of a large disc, flexed upon itself in the posterior compartment.

It is evident that no alteration in the accustomed relationship between the meniscus and the opposing condyles can occur until antero-posterior mobility of the meniscus is increased much above the normal. The deeper the femur sinks into the substance of the fibrocartilage, the closer the meniscus must follow movements of the condyle, and the greater must be the subsequent stretching of both anterior and posterior peripheral attachments. Eventually, perhaps because of some trivial incident which occurs when the knee joint is in a position just short of full extension, the condyle mounts the ridge, or slips over the anterior periphery, and drives the meniscus backwards. This action completes the stretching, or even tears the anterior peripheral attachment so that the meniscus comes to lie partly, or completely, behind the femur (Figs. 9B, 9C, and 9D). Return to the original position takes place at a point short of full flexion when the condyle mounts the ridge from the opposite side and drives the structure forward again.

In two cases in this series the snap was due to a ridge (Figs. 9A and 9B). At operation the peripheral attachment was found to be stretched. When it had been divided, the margin of the meniscus was seen appearing just beneath the femoral condyle. Traction on the periphery, or further flexion of the joint, made the meniscus slip forwards so that the femoral condyle lay in the large posterior facet.

FIG. 10

Inferior surface of a primitive disc which lay flexed acutely upon itself behind the femoral condyle in extension; the anterior peripheral attachment was completely torn. Note the groove corresponding to the apex of the curve.

In the other two cases a snap was produced by the condyle slipping over the thick anterior margin so that the meniscus lay behind the femoral condyle. In one, the peripheral attachment took the form of a transparent film of tissue stretched over the articular surface of the tibial table; the meniscus was small enough to lie horizontally behind the condyle (Fig. 9C). In the second, the peripheral attachment was completely torn; in this case the disc was so large that it could not be accommodated except when flexed acutely upon itself behind the femur (Fig. 9D). The specimen showed a deep furrow which corresponded to the apex of the curve (Fig. 10).

Other sequelae of horizontal cleavage—Three primitive discs, each with horizontal cleavage, were discovered in the course of other operations—two during routine examination of a joint after removing a torn medial meniscus, and one in the course of an

operation for osteochondritis dissecans involving the medial femoral condyle. Could there be any association between these conditions? In two cases of injury of the medial meniscus the lesion was not the usual longitudinal tear; it was an injury of the type which is associated with recurrent incidents in an unstable joint. In the third case, osteochondritis of the medial femoral condyle was due to impingement of the tibial spine. It is not unlikely that all three lesions were the direct result of instability due to horizontal cleavage in a thick, weight-bearing, lateral meniscus.

THE INTERMEDIATE DISC

It is difficult to define the intermediate type of congenital discoid meniscus. The title suggests that it lies midway between the primitive and infantile types of disc, but undoubtedly it resembles the primitive type more closely, so much so that it might be regarded as a sub-type rather than a separate variety. The principal difference is that it is less massive, less complete, and much thinner in the central zone (Fig. 2). The central margin shows two

TABLE I

No.	Sex	Age	Side	Anatomical type	Outstanding features of the lesion	Cystic degeneration
1	M	18	R	Primitive	Horizontal cleavage: superficial longitudinal tear of the inferior surface	Yes
2	M	33	L	Primitive	Horizontal cleavage: surfaces undamaged	—
3	M	21	L	Intermediate	No obvious lesion	—
4	M	31	L	Primitive	No obvious lesion	—
5	M	25	R	Infantile	Posterior peripheral longitudinal tear	Yes
6	M	27	L	Primitive	Horizontal cleavage: inferior and superior superficial tears resulting in a hole in the centre	—
7	M	33	R	Infantile	Incomplete oblique tear	Yes
8	M	20	L	Primitive	Horizontal cleavage: anterior peripheral detachment	Yes
9	M	29	R	Primitive	Medial cartilage. Horizontal cleavage: whole inferior surface worn away	Yes
10	M	20	L	Primitive	Horizontal cleavage: anterior and posterior ridges resulting from wearing away of inferior surface: posterior peripheral detachment	—
11	M	21	L	Intermediate	Anterior longitudinal tear	—
12	M	30	R	Primitive	Horizontal cleavage: both surfaces worn away resulting in a hole in the centre	—
13	M	25	R	Primitive	Horizontal cleavage: anterior peripheral longitudinal tear	—
14	M	22	L	Infantile	Incomplete oblique tear	Yes
15	F	25	L	Primitive	Horizontal cleavage: single ridge resulting from wearing away of the inferior surface	—
16	M	51	L	Infantile	Incomplete oblique tear	—
17	M	18	R	Primitive	Horizontal cleavage: under-surface worn away	—
18	M	36	L	Intermediate	Posterior longitudinal tear	—
19	M	17	L	Infantile	Structure undamaged: torn from all peripheral attachments in the course of dislocation of knee	—
20	M	14	L	Primitive	Horizontal cleavage: superficial longitudinal tear of the inferior surface	—
21	M	51	L	Primitive	Horizontal cleavage: inferior surface worn away	Yes
22	M	17	R	Intermediate	Posterior longitudinal tear	—
23	F	20	R	Intermediate	Anterior peripheral detachment	—
24	M	26	L	Intermediate	Posterior peripheral detachment and posterior longitudinal tear	—
25	M	26	R	Primitive	Horizontal cleavage: superficial longitudinal tear of the superior surface	Yes
26	M	19	L	Infantile	Incomplete oblique tear	Yes
27	F	15	R	Primitive	Horizontal cleavage: anterior portion inferior surface worn away: gross stretching anterior peripheral attachment	—
28	M	16	R	Intermediate	Structure undamaged: gross stretching of the posterior peripheral attachment	—
29	M	16	L	Intermediate	Posterior peripheral detachment and posterior longitudinal tear	—

In Cases 10, 15, 23, and 27 there was the dramatic sign of "snapping knee" which made pre-operative diagnosis easy. The correct diagnosis was also made before operation in Case 29 (which was the second knee in a bilateral case) and in Case 26 where success was attributable to no more than "intelligent anticipation."

notches, one behind the anterior central attachment and one in front of the posterior central attachment. Between the notches is a convex area directed towards the centre of the joint. But the characteristic of this type is not so much the outline of the free border, which may be seen also in the primitive variety, as the thinness of the border, even to the point of transparency, a feature which is present, if in lesser degree, throughout the whole central region. This in fact is the type, and the only type, to which the vague words so often used, "thin and transparent on the medial border," actually apply. The depth of the periphery of eight such specimens varied between 5 and 6 millimetres. The rim was thus less deep than the normal average.

Injuries of the intermediate disc—The characteristic injury sustained by congenital discs of the intermediate type is a peripheral or extra-peripheral longitudinal tear. Five specimens showed posterior lesions. In four it took the form of a longitudinal tear. Two of these also showed posterior peripheral detachment (Fig. 11). In the fifth case

FIG. 11

FIG. 12

Intermediate discs showing posterior longitudinal tears.

Fig. 11 shows a specimen with posterior peripheral detachment and posterior peripheral longitudinal tear. Fig. 12 shows a longitudinal tear entering at the posterior notch.

the posterior peripheral attachment was markedly stretched. Two showed anterior lesions, one taking the form of a longitudinal tear, and one a complete detachment of the anterior segment. In one case there was no obvious injury. In no specimen was there evidence of a compression lesion of the central zone such as was seen in the primitive disc. It appears, therefore, that injuries sustained by congenital discs of the intermediate type correspond more or less exactly to the usual injuries of normal lateral menisci. The intrusion of a thin central zone between the femoral and tibial condyles does not appear to exert any influence on the type of injury sustained.

THE INFANTILE DISC

In some respects this type resembles the meniscus as it exists in the full-term foetus. It is the variety of congenital abnormality which most nearly approaches the normal structure, differing only in the very greatly increased breadth of the middle segment. One of the characteristic features of the normal lateral meniscus is the uniformity of breadth of the anterior, middle, and posterior segments. Nevertheless, there is often increase in the width of the middle segment which is considered to lie within the bounds of normality. Only cases in which this increase was unmistakably abnormal have been included in this group (Fig. 3).

There were six such cases. The depth of the periphery varied between 9.5 millimetres and 6 millimetres; the average was 8 millimetres. The periphery was thus slightly thicker than the normal average. The fibrocartilage tapers to a sharp crescentic edge, as in the normal structure.

Injuries of the infantile disc—The normal lateral meniscus is subject not only to the usual peripheral and extra-peripheral longitudinal tears, but also to an intrinsic lesion, namely, incomplete transverse or oblique tear (Smillie 1946). This particular injury occurs on the lateral side for the reason not only that the meniscus is more broad but also that it is a segment of a smaller circle than its medial counterpart. Thus any force which tends to straighten the concave margin is likely to cause a transverse tear. It is to be expected that liability to such a tear would be greater in the infantile type of disc, because the concave edge is even less in a position to withstand strains which tend to increase the distance between the anterior and posterior segments. Four of the six specimens demonstrated this lesion (Fig. 13). There

FIG. 13

FIG. 14

Infantile and Primitive discs with tears.

Fig. 13 shows an infantile disc with an incomplete oblique tear. Fig. 14 shows a primitive disc with surface split entering horizontal cleavage, and multiple cysts in the peripheral zone.

was one which showed a posterior peripheral longitudinal tear, and one in which the meniscus had been torn from its posterior peripheral attachment.

Two anatomical types of normal lateral meniscus—It has already been stated that thirty ordinary lateral menisci were taken from the general collection for the purpose of comparing the depth of the periphery with that of the normal structure. In the course of taking measurements it became obvious that there were, in general, two anatomical types—one in which the anterior, middle, and posterior segments were of uniform breadth and where the lesion was either a longitudinal tear or a peripheral detachment of the posterior segment; and one in which the middle segment was much more broad and in which the lesion was almost invariably an incomplete transverse tear. Comparison between these menisci, and the six discs to which the name "infantile" has been attached, make it clear that they were no more than outstanding examples of a common type which by reason of abnormality of breadth is liable to a particular injury. It is thus evident that the six cases now recorded as congenital discs of the infantile type do not represent a true picture of the frequency with which this variety occurs. Nor is it unlikely that, as a source of trouble in the knee joint, further experience may prove it to be the most important of the three anatomical varieties.

COMPARISON OF ANATOMY AND PATHOLOGY WITH PREVIOUSLY REPORTED CASES

From the descriptions and illustrations which have been published in earlier articles, it is clear that many specimens on record correspond closely to the primitive and intermediate types here described. It is evident also that the infantile type of disc has been recognised as a congenital abnormality: for example, Bell Jones (1935) illustrated a typical specimen showing the characteristic incomplete oblique tear.

The curious varieties which have been described in some earlier papers have not been seen. There has been no case of anterior and posterior horns joined by fibrous tissue as recorded by Naughton Dunn (1934); or of reversed disc, absent posterior half, or free margins in unusual positions, as recorded by Fairbank * (1937). It is difficult to explain such entities on embryological grounds. Some may be freaks; but it seems probable that most of them were extraordinary examples of the effects of injury on primitive discs. For example, the "reversed disc" and those with a "hole in the centre," described by Fairbank (1937) and McMurray (1942), almost certainly represent the late stages of horizontal cleavage. The "absent posterior half," and "free margins in unusual positions," are examples of peripheral detachments known to be common in the congenital abnormality.

ASSOCIATION OF CONGENITAL DISCS WITH CYSTIC DEGENERATION

The association of cystic change with congenital malformation has been recorded by Ollerenshaw (1935), Herzmark (1936), Ober (1939), Meekison (1940), Kulowski (1940), and Kulowski and Rickett (1947). In this series nine specimens were the subject of cystic degeneration, this being the diagnosis which led to operative intervention. Cystic changes occurred in five primitive discs (Fig. 14), including the one example of medial disc (Figs. 15, 16A, 16B,) and in four infantile discs. This is not the occasion to discuss the etiology of meniscus cysts. The writer holds the view that they are traumatic in origin. If it is correct to believe that congenitally abnormal menisci are even more vulnerable to injury than normal menisci, it might reasonably be expected that the incidence of cystic degeneration would also be higher. The statistics of this series of cases cannot establish proof, but they suggest that this may be true. In a total of 468 lateral meniscectomies, 105 showed cystic degeneration—namely 22 per cent. In twenty-eight lateral discs, eight showed cystic degeneration—28 per cent.

DISCOID MEDIAL MENISCUS

Until 1945, when Dwyer and Taylor's case was described, there appears to be no record in the literature of a discoid medial meniscus. It was accepted that the anomaly occurred only on the lateral side of the joint. The only case which the writer has seen was operated upon in 1943 and reported in 1946. This specimen, and the one described by Dwyer and Taylor, were both discs of the primitive type. It is thus evident that congenital malformations of the discoid type may occur in either meniscus, but that persistence of the embryonic state on the medial side is very rare.

Injuries of the discoid medial meniscus—The single specimen available for examination had originally been the subject of horizontal cleavage but almost the entire inferior surface had worn away, leaving evidence of the primary lesion only at the anterior half of the periphery (Fig. 16B); the superior surface was undamaged (Fig. 16A). In addition to the

* By courtesy of Sir Thomas Fairbank, the writer has been permitted to examine the clinical notes and original drawings of his fifteen cases, three of which were bilateral.

lesion of the substance of the fibrocartilage, there was cystic degeneration; and this was the diagnosis with which the patient came to operation (Fig. 15). Unfortunately the exceptional nature of the case was not appreciated at the beginning of the operation and no care was

FIG. 15

Clinical appearance of the knee in a case of discoid medial meniscus with cystic degeneration.

FIG. 16A

FIG. 16B

Disc removed from the knee joint shown in Fig. 15. Fig. 16A shows the undamaged superior surface. Fig. 16B shows the inferior surface; it is worn away; the original horizontal cleavage is seen at the periphery. (The cyst has been removed from the specimen.)

taken to preserve the attachment of the cystic mass to the meniscus; it was located at the junction of the anterior and middle thirds of the periphery. In the case reported by Dwyer and Taylor (1945) the photograph and accompanying description indicate that there was horizontal cleavage of the disc with also a longitudinal tear on the superior surface.

SUMMARY

1. A personal series of twenty-nine discoid menisci is reviewed.
2. Three anatomical types are recognised and described.
3. The characteristic lesions incurred by each type is recorded.
4. The anatomical and pathological features of the specimens are compared with those of cases previously recorded.
5. A discoid medial meniscus is described, and compared with the only other specimen known to be recorded in the literature.

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