HEADNOTE: Deborah Yonce, etc., et al. v. SmithKline et al., No. 1560, September Term, 1995

PROXIMATE CAUSE -- FORESEEABILITY -- INTERVENING SUPERSEDING CAUSE --

Question of fact whether, after laboratory's negligent destruction of sample from first amniocentesis, plaintiff's decision to undergo a second amniocentesis and the contraction of an infection as a result of it, causing premature birth and death of the fetuses, were foreseeable and constituted superseding causes.

REPORTED

IN THE COURT OF SPECIAL APPEALS

OF MARYLAND

No. 1560

September Term, 1995

DEBORAH YONCE, INDIVIDUALLY, etc., et al.

v.

SMITHKLINE BEECHAM CLINICAL LABORATORIES, INC., et al.

Wilner, C.J.,
Eyler,
Getty, James S.
(Retired, specially assigned),
JJ.

Opinion by Eyler, J.

Filed: June 28, 1996

The premature births, and untimely deaths, of monozygotic (identical) twins born to appellants Deborah and Dennis Yonce gave rise to the litigation presently before us. Suit was brought by appellants as personal representatives of the deceased infants' estates, as parents for the wrongful deaths of their two minor children, by Deborah Yonce individually, and by appellants jointly for loss of consortium. They filed suit on September 22, 1993 in the Circuit Court for Baltimore City against SmithKline Beecham Corporation and two of its subsidiaries, appellees ("SmithKline"),[1] and, on about the same date, filed an action in the Health Claims Arbitration Office against Roger C. Sanders, M.D., et al., appellee ("Sanders").[2] On November 2, 1993, SmithKline removed the case to the United States District Court for the District of Maryland. Thereafter, following a waiver of arbitration, appellants petitioned the United States District Court for leave to amend their complaint to add Sanders as a defendant. The claims against Sanders were based on negligence, and the claims against SmithKline were based on negligence and breach of contract. In an order dated August 9, 1994, the United States District Court granted the petition, thereby destroying

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[1]Named in the complaint were SmithKline Beecham Clinical Laboratories, Inc. and SmithKline Bios Science Laboratories, Inc.

[2]Appellants named as defendants Roger C. Sanders, M.D., P.A., Roger C. Sanders, M.D., t/a Ultrasound Institute of Baltimore, and Roger C. Sanders, M.D., P.A., t/a Ultrasound Institute of Baltimore ("Institute").

diversity of citizenship and, accordingly, remanded the matter to the circuit court.

SmithKline filed a motion for summary judgment with respect to all counts pertaining to it. The motion and memorandum in support thereof asserted lack of proximate cause and assumption of the risk as defenses to the tort counts; with respect to the contract counts, it asserted that Deborah Yonce was not a third-party beneficiary of a contract between Sanders and SmithKline and the alleged damages were not legally recoverable in a contract action. The circuit court heard argument on all of these issues in December of 1994. On January 24, 1995, the circuit court issued a memorandum opinion in which it concluded that SmithKline was entitled to summary judgment. Although the circuit court granted summary judgment in favor of SmithKline with respect to all counts (negligence and contract), in its opinion the circuit court referred only to the negligence claims and to the defense of proximate cause.[3] On February 13, 1995, appellants filed a motion requesting the circuit court to enter a

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[3]The circuit court began its analysis with the proposition that follows:

> Although the substantive arguments made within many of the counts often fail to support the elements of the cause of action named in the caption of the count, this court recognizes that plaintiffs' case has been brought under two theories of relief: Negligence, and Wrongful Death.

final judgment pursuant to Maryland Rule 2-602.[4] The circuit court denied the motion on March 17, 1995. Appellants then filed a motion for reconsideration, in which they reiterated, among other things, that none of the defendants opposed appellants' motion for entry of a final judgment. The circuit court, nevertheless, denied that motion on April 24, 1995. Subsequently, Sanders moved for summary judgment on the ground of lack of proximate cause, based on the circuit court's judgment entered on behalf of SmithKline. In August of that year, the circuit court granted Sanders' motion for summary judgment.

Unsatisfied with the events that transpired below, appellants noted an appeal from the entry of summary judgment in favor of SmithKline and Sanders, and pose three question to us:[5]

> I. Can the admittedly negligent destruction of a medical sample be a proximate cause of damages sustained as a result of a subsequent medical procedure required to obtain a replacement sample?
>
> II. Where a defendant negligently destroys a medical sample, does the patient

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[4]Apparently in the erroneous belief that the motion had been granted, on February 27, 1995, appellants noted an appeal to this Court from the circuit court's memorandum opinion and order granting summary judgment on behalf of SmithKline. Chief Judge Wilner dismissed that appeal on May 5, 1995 for failure to file an information report. See Md. Rules 8-205 & 8-206(e).

[5]Neither party raises issues with respect to the circuit court's entry of summary judgment on the contract counts. Thus, the entry of summary judgment on those counts is not before us, and that portion of the judgment remains in effect. See Harrison v. Harrison, ___ Md. App. ___ (No. 1232, Sept. Term, 1995, filed May 3, 1996), Slip Op. at 23-25.

'voluntarily' encounter the risks associated with a subsequent medical procedure required to obtain a replacement sample, for purposes of the doctrine of assumption of the risk?

III. Where a defendant negligently destroys a medical sample, is the patient's 'understanding and appreciation' of the risks associated with the second procedure properly a genuine issue of material fact to be resolved by a jury?

Sometime in May of 1990, appellant Deborah Yonce learned that she was pregnant.[6] On June 29, 1990, Ms. Yonce went to the offices of Doctors Glowacki, Elberfeld & Spangler, P.A., Inc. ("Clinic"), for prenatal care and met with Shirley Secrest, a certified nurse midwife. In her deposition, Ms. Yonce testified that she could not recall the content of her conversation with Secrest. Secrest stated, in an affidavit, that she counseled Ms. Yonce regarding amniocentesis[7] and chorionic villus sampling ("CVS")[8] and, although she could not recall the actual conversation, she followed her normal routine and detailed the

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[6]Yonce gave birth to a son in 1987 and a daughter in 1992; two other pregnancies prior to May, 1990 had resulted in miscarriages.

[7]Amniocentesis is the transabdominal aspiration of fluid from the amniotic sac. The fluid is generally tested to determine whether the fetus suffers from chromosomal abnormalities; one by-product of the testing procedure is reliable information pertaining to the sex.

[8]The chorion is the outer of the two membranes that surround the fetus; the amnion is the inner one. The chorion is rooted to the uterus by finger-like projections called villus. As pregnancy progresses, part of the chorion becomes the placenta. Sampling involves the removal and testing of chorionic villus.

risks attendant to an advanced maternal age delivery (thirty-five years or over).[9] On July 9, 1990, Ms. Yonce returned to the

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[9]Yonce's advanced age (thirty-five at expected time of delivery) increased the risks of genetic abnormalities and other complications.

Secrest testified that the information normally related by her included:

> 2. My duties as a certified nurse midwife include counselling patients concerning the risks and benefits of amniocentesis and CVS (chorionic villus sampling).
> 3. This counselling is given to every patient who will be of advanced maternal age (thirty-five or over) at the time of delivery.
> 4. I give each patient instructional materials and information about care for her pregnancy.
> 5. I discuss the various methods available for evaluating a fetus, including amniocentesis and CVS.
> 6. I discuss how CVS is done. I tell each patient that CVS is done early in pregnancy, at about 10 to 12 weeks gestation. I inform the patient that CVS is done through the vagina and involves taking tissue from the placenta. I inform the patient that this procedure has the advantage of an earlier diagnosis of chromosomal abnormalities than with amniocentesis, and thus an earlier possible pregnancy termination, if the patient so chooses. I counsel the patient that this procedure can result in infection and that the risk of abortion is about one percent.
> 7. I discuss how an amniocentesis is done. I tell each patient that an amniocentesis is done later in the pregnancy than is CVS. I counsel that there is a risk of infection with amniocentesis, as well as a risk of abortion which is variously stated between one-in-two hundred and one-in-three hundred.
> 8. I explain the difference between

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Clinic and met with Dr. Spangler. According to Ms. Yonce, Dr. Spangler discussed with her the potential hazards associated with her pregnancy (e.g., chromosomal abnormalities), explained to her the various testing options and attendant risks, including amniocentesis and CVS, and gave her assorted medical literature pertaining to the subjects under discussion.[10]

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[9](...continued)

> amniocentesis and CVS. I discuss the reasons for having the procedures and discuss the risks and benefits of each. I specifically discuss the advantages and disadvantages of the later possible termination of a pregnancy available with amniocentesis. I ask each patient to consider the reasons for having the procedures and the risks and benefits of each.
> 9. I inquire as to each patient's thoughts and desires regarding termination of a pregnancy. If it is my impression that a patient would not terminate a pregnancy under any circumstances, I counsel the patient that she may wish to reconsider whether to have a particular procedure.
> 10. A copy of the medical chart attached hereto as Exhibit A reflects that on June 29, 1990, Mrs. Deborah Yonce was seen in the office and that I counseled her regarding amniocentesis and CVS. Because Mrs. Yonce was of advanced maternal age, there was an increased risk of chromosomal abnormalities in the fetus.
> 11. Although I do not recall my actual conversation with Mrs. Yonce on June 29, 1990, I would have counseled her as I do all patients who will be of advanced maternal age at the time of delivery with respect to the items mentioned above in paragraphs 4-9. . . .

[10]During Dr. Spangler's deposition, he described the information normally provided by him and that he provided to Ms.

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[10](...continued)
Yonce during her July 9th visit to the Clinic.

> [T]he first thing I usually discuss with the patient is that when a patient has an advanced maternal age, it subjects them to an increased risk for chromosomal abnormalities in the fetus. And we usually discuss just what that means in terms of an increased risk for the possibility of mongolism, or down [sic] syndrome, and several other similar kinds of abnormalities. That the patient, because of this increased risk, has an option to detect that early in the pregnancy; and if they should so choose to terminate the pregnancy given further information based on the results of the testing.
>
> They are informed that there is a risk and a benefit to this. That the benefit is that they have the information and can now make an informed decision. And that there are a number of different kinds of risks involved in the procedure itself.
>
> We discuss that it's usually offered beginning at age 35, because the risks and benefits at that point turn out to be about equal. That is that women who are 35 years of age have about a five in a thousand risk that they are going to have a chromosomal abnormality in the fetus, and that the risk of the procedure being one in three hundred to one in two hundred is about a five in a thousand risk that there could be a complication from the procedure.
>
> And we discuss the CVS aspect of it, and pretty much do it as I outlined; that is that there are advantages to chorionic villus sampling, which include earlier diagnosis, and consequently the possibility of a safer, earlier, more private termination.
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> I express to them I have reservations about chorionic villus, because it is a procedure that carries more risk to it, in terms of an increased abortion rate of about one in a hundred.
>
> I then outline the amniocentesis and

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Approximately one month later, Ms. Yonce telephoned the Clinic and informed the office staff that she wished to have an

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[10](...continued)

indicate how that procedure will be done. And we discuss the fact that by amniocentesis there would be an increased risk should termination be elected, because its a more involved procedure that would involve vaginal delivery.

I then sit down and outline the risks and complications to the mother and the fetus. And I explain that the risk to the mother includes infection, and includes injury to the mother, including in particular injury to blood vessels, which might lead to hemorrhage or bleeding.

I indicate that there is a risk for amniocentesis of premature labor, just like there is a risk in chorionic villus of infection and abortion. And I indicate that there is a risk to the fetus. And the risk to the fetus includes infection, includes bleeding from the placenta or blood vessels and the cord, which could lead to labor, and loss of the pregnancy. That the risk to the fetus in terms of injury is minimal, with needle stick anywhere except in the area of the face and eyes. But that if infection should occur, it is quite possible that the pregnancy would be lost. And I indicate that that risk is probably somewhere around one in three hundred of an actual abortion from the procedure itself, or complications thereof.

I indicate that-- in this case I don't think Deborah was RH negative. Let me check that out. She was A positive, so I would not have discussed the issues of sensitization of the fetus from the amniocentesis.

Finally, I indicate that there are technical complications in the procedure, which involve cells not growing, and which involve loss of fluid, mislabeling [sic] of fluid, which might result in the procedure having to be repeated, should they choose.

amniocentesis performed. Ms. Yonce, who understood that the procedure was indicated, but elective, had discussed the matter with her husband and weighed the risks involved. She testified in her deposition as follows:

> Q What was the nature of discussion that you had with your husband concerning amniocentesis?
>
> A Which test to have, the amniocentesis or the CVS? The CVS didn't seem to be as safe. The percentages and the possible outcome seemed not as, it didn't seem as safe to have the CVS as what it did the amniocentesis, so we decided on the amniocentesis.

Ms. Yonce's amniocentesis was delayed from the scheduled date of September 5 because a sonogram conducted on that day revealed that she was carrying twins and the sonographers could not determine whether the twins were enveloped within one amniotic sac or separate sacs. Three more failed attempts at visualizing sac separation led Dr. Elberfeld, of the Clinic, to refer Ms. Yonce to Dr. Sanders and his Institute.

Ms. Yonce met with Dr. Sanders at the Institute on September 26, 1990, where they discussed, as he noted in his deposition, the reasons for conducting an amniocentesis and the risks associated with the procedure.

> Q What did you tell her about the benefits and the risks?
>
> A I told her this was a procedure that carried with it a risk of ending the pregnancy somewhere between one and two hundred or one in three hundred.
>
> I told her there were several

> complications associated with the performance of an amniocentesis, which in total added up to that risk.
>
> Complications that I mentioned were induction of premature labor and hemorrhage, loss of fluid and infection.

In her deposition, Ms. Yonce declared that Dr. Sanders did not discuss with her the risks and benefits of the amniocentesis. Instead, she was told to sign a consent form "where it sa[id] patient," and she did so. Knowing that she carried twins, Ms. Yonce explained why she decided to undergo the first amniocentesis.

> Q What made you decide to go ahead with the amniocentesis?
>
> A I thought that it was the best thing. I thought that it would help to know about my babies, which I knew there was two at the time, and because of my age, if there were problems, the results that would come out of the tests might, you know, help my doctors and us.
>
> They told us that they could let us know the sex. They pretty much knew the sex of the babies from the sonogram, but they would not guarantee it. I was apparently too early. I just thought that it was something that I should do.
>
> Q But you realized that you had the option not to have it done?
>
> A Yes.
>
> Q Did you decide with your husband what you would have done had you found out that there was a chromosomal abnormality?
>
> A We never discussed that. We never discussed what, you know, what the tests would have shown and what we would have done.

> Q You were just going to cross that bridge when you came to it, if you came to it?
>
> A Yes.
>
> Q Was finding out the sex one of the important factors in making this decision?
>
> A It was one of them.

The amniocentesis procedure was uneventful and produced a specimen from each sac. An Institute employee packaged the specimen and contacted SmithKline's laboratory for pick-up. Unfortunately, the specimens were rendered useless when the transporter placed them on dry ice and froze them.[11]

Dr. Sanders telephoned Ms. Yonce, informed her that the specimens were useless and scheduled another amniocentesis. According to Dr. Sanders, prior to the second amniocentesis, he informed Ms. Yonce "that the risks and benefits [of the second amniocentesis] were essentially the same as they had been on the previous occasion." Ms. Yonce contacted Dr. Elberfeld, who told her that "the risk of having it [an amniocentesis] the second time would be approximately the same as having it the first time. . . . [S]o she would be taking the risk twice." On October 2, 1990, Ms. Yonce submitted to a second amniocentesis performed by

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[11]Listed in capital letters on SmithKline's chromosome analysis, amniotic fluid specimen requirements is the following statement: "DO NOT USE COLD PACKS. DO NOT FREEZE OR REFRIGERATE."

Dr. Sanders.[12] After the second amniocentesis, Ms. Yonce felt "fine, relieved." The next day, however, she became ill and, pursuant to Dr. Elberfeld's instructions, reported to the hospital. At the hospital, Dr. Elberfeld examined Ms. Yonce, reviewed her test results, and diagnosed her condition as chorioamnionitis.[13] Because chorioamnionitis "was basically a death sentence for the pregnancy," Dr. Elberfeld ordered another amniocentesis. The results of that test confirmed that one amniotic sac was infected with staphylococcus. Dr. Elberfeld then had no choice but to induce labor, even though the fetuses were not viable. Ms. Yonce gave birth to identical twins who lived for forty-two minutes and one hour and twenty-two minutes, respectively. The pathologist, Dr. Sandra L. Buchart, released her surgical pathology report on September 8, 1990, in which she stated, among other things, her final diagnosis: "Choriamnionitis [sic], presumed secondary to amniocentesis, Staphylococcal."

For purposes of appellees' motion for summary judgment, the following statements in this paragraph were not in dispute below and are not in dispute on appeal. SmithKline was negligent in its handling of the sample.[14] Dr. Sanders was not negligent in

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[12]Dr. Sanders did not have Ms. Yonce sign a second informed consent form.

[13]Chorioamnionitis is the infection of the chorion, amnion, and amniotic fluid.

[14]In their brief, at page 7, footnote 1, appellants point

(continued...)

performing the second amniocentesis. The pregnancy would have been uneventful in the absence of the infection, and the infection was attributable to the second amniocentesis. The risk of fetal death as a result of an amniocentesis is between .33% and .5%. Both procedures were elective; the first amniocentesis did not create a condition that made the second amniocentesis mandatory.

Before we delve into the issues presented, we note that our task is to determine whether the circuit court's grant of appellees' motion for summary judgment was legally correct. Dixon v. Able Equip. Co., Inc., 107 Md. App. 541, 543-44 (1995). The circuit court, in turn, was empowered to

> enter judgment in favor of or against the moving party if the motion and response show that there is no genuine dispute as to any material fact and that the party in whose favor judgment is entered is entitled to judgment as a matter of law. . . .

Md. Rule 2-501(e) (1996).

I. Proximate Causation

A. General Principles

The circuit court perceived that the question before it was "whether liability lies when a negligent act is followed by a second, non-negligent act, and the non-negligent act is the

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[14](...continued)
out that, in fact, a dispute exists as to which appellee, SmithKline or Sanders, "bears responsibility for the negligent freezing and destruction of the amniotic fluid samples."

proximate cause of the injury." As stated, the question contained the answer. The question stated neutrally is whether there is legally sufficient evidence to permit a factfinder to conclude that the negligent act was a proximate cause of the harm.

In order for a plaintiff to prove a cause of action in negligence, the plaintiff must establish the following:

> (1) that the defendant was under a duty to protect the plaintiff from injury, (2) that the defendant breached that duty, (3) that the plaintiff suffered actual injury or loss, and (4) that the loss or injury proximately resulted from the defendant's breach of the duty.

Rosenblatt v. Exxon Co., U.S.A., 335 Md. 58, 76 (1994).[15] The subject matter of the present dispute, proximate cause, the fourth element of the negligence calculus, is a concept that possesses a chameleon-like ability to defy precise categorization, and must be analyzed on a case-by-case basis. As noted by Prosser and Keeton:

> There is perhaps nothing in the entire field of law which has called forth more disagreement, or upon which the opinions are in such a welter of confusion. Nor, despite the manifold attempts which have been made to clarify the subject, is there yet any general agreement as to the best approach. Much of this confusion is due to the fact that no one problem is involved, but a number of different problems, which are not

[15]Maryland recognizes a cause of action for wrongful death of a non-viable fetus, born alive. See Group Health Ass'n v. Blumenthal, 295 Md. 104 (1983).

> distinguished clearly, and that language appropriate to a discussion of one is carried over to cast a shadow upon the others.

PROSSER AND KEETON ON THE LAW OF TORTS § 41, at 26 (5th ed. 1984) ("PROSSER & KEETON"). Writing for the Court of Appeals, Judge Digges declared that

> [p]roximate cause ultimately involves a conclusion that someone will be held legally responsible for the consequences of an act or omission. This determination is subject to considerations of fairness or social policy as well as mere causation.

Peterson v. Underwood, 258 Md. 9, 16 (1970).

Authors of treatises and texts have pointed out that courts sometimes confuse and sometimes discuss interchangeably the question of whether a duty exists in the first instance with the question of proximate cause. A negligent act, to be actionable, requires a duty to protect an injured party from risk of harm from the hazard in question, i.e., an unreasonable risk. A specific fact situation can be analyzed in terms of a duty or, if a duty is assumed or held to exist, in terms of proximate cause. In this case, as did the parties, we assume the existence of a duty.

Two subparts comprise the element of proximate cause.

> [T]he element of proximate cause is satisfied if the negligence is 1) a cause in fact of the injury and 2) a legally cognizable cause.

Baltimore Gas & Elec. Co. v. Lane, 338 Md. 34, 51 (1995). Our courts have used two tests when determining whether a defendant's

negligence is the cause in fact of a plaintiff's injury. Respectively, they are described as the "but for" and "substantial factor" tests. See Peterson, 258 Md. at 16; Bartholomee v. Casey, 103 Md. App. 34, 56-57 (1994), cert. denied, 338 Md. 557 (1995). By its nature, the "but for" test applies when the injury would not have occurred in the absence of the defendant's negligent act. Peterson, 258 Md. at 16. The "but for" test does not resolve situations in which two independent causes concur to bring about an injury, and either cause, standing alone, would have wrought the identical harm. The "substantial factor" test was created to meet this need but has been used frequently in other situations. PROSSER & KEETON § 41 at 266, quoted in Eagle-Picher Indus., Inc. v. Balbos, 326 Md. 179, 208 (1992). The "substantial factor" test is firmly rooted in the Restatement (Second) of Torts ("RESTATEMENT") approach to proximate cause.

> § 431. What Constitutes Legal Cause
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> The actor's negligent conduct is a legal cause of harm to another if
>
> (a) his conduct is a substantial factor in bringing about the harm, and
>
> (b) there is no rule of law relieving the actor from liability because of the manner in which his negligence has resulted in the harm.
>
> § 433. Considerations Important in Determining Whether Negligent Conduct is Substantial Factor in Producing Harm

> The following considerations are in themselves or in combination with one another important in determining whether the actor's conduct is a substantial factor in bringing about harm to another:
>
> (a) the number of other factors which contribute in producing the harm and the extent of the effect which they have in producing it;
>
> (b) whether the actor's conduct has created a force or series of forces which are in continuous and active operation up to the time of the harm, or has created a situation harmless unless acted upon by other forces for which the actor is not responsible;
>
> (c) lapse of time.

See Bartholomee, 103 Md. App. at 56 (compiling Maryland cases utilizing the "substantial factor" test).

Regardless of the test employed, the focus remains on the fundamental and sometimes metaphysical inquiry into the nexus between the defendant's negligent act and the resultant harm to the plaintiff. See Peterson, 258 Md. at 16-17. If there is no causation in fact, we need go no further for our inquiry has reached a terminal point. If, on the other hand, there is causation in fact, our inquiry continues. Mackin v. Harris, 342 Md. 1, 8 (1996).

If causation in fact exists, a defendant will not be relieved from liability for an injury if, at the time of the defendant's negligent act, the defendant should have foreseen the "general field of danger," not necessarily the specific kind of harm to which the injured party would be subjected as a result of

the defendant's negligence. Stone v. Chicago Title Ins. Co., 330 Md. 329, 337 (1993). This is in accord with the Restatement.

> § 435. Foreseeability of Harm or Manner of Its Occurrence
>
> (1) If the actor's conduct is a substantial factor in bringing about harm to another, the fact that the actor neither foresaw nor should have foreseen the extent of the harm or the manner in which it occurred does not prevent him from being liable.
>
> (2) The actor's conduct may be held not to be a legal cause of harm to another where after the event and looking back from the harm to the actor's negligent conduct, it appears to the court highly extraordinary that it should have brought about the harm.

Quoted in Hartford Ins. Co. v. Manor Inn, 335 Md. 135, 157 n.6. (1994).

The notion of foreseeability is also invoked in a determination of proximate cause when two or more non-simultaneous causes are at play. The chain of causation may be broken by an intervening force (negligent or non-negligent) that may, in turn, become a superseding cause, in which case the original tortfeasor's liability will terminate.

> When more than one act of negligence arguably could be responsible for the injury, the question that is presented is whether the second in point of time superseded the first, *i.e.*, did that act intervene and supersede the original act of negligence, thus terminating its role in the causation chain?

Hartford, 335 Md. at 157. An intervening force is a superseding cause if the intervening force was foreseeable at the time of the

primary negligence.

> The connection between a defendant's negligence and the plaintiff's injury may be broken by an intervening cause. But in order to excuse the defendant, this intervening cause must be either a superseding or a responsible cause. It is a superseding cause, whether intelligent or not, if it so entirely supersedes the operation of the defendant's negligence that it alone, without his negligence contributing thereto in the slightest degree, produces the injury. It is a responsible one, if it is the culpable act of a human being, who is legally responsible for such act. The defendant's negligence is not deemed the proximate cause of the injury, when the connection is thus actually broken by a responsible intervening cause. But the connection is not actually broken, if the intervening event is one which might, in the natural and ordinary course of things, be anticipated as not entirely improbable, and the defendant's negligence is an essential link in the chain of causation.

State ex rel. Schiller v. Hecht Co., 165 Md. 415, 421 (1933).

Normally, the "foreseeability inquiry is . . . a question of fact to be decided by the trier of fact." Lane, 338 Md. at 52.

> It is only when the facts are undisputed, and are susceptible of but one inference, that the question is one of law for the court . . . .

Lashley v. Dawson, 162 Md. 549, 563 (1932).

B. Application of Principles to this case

1. Causation in fact

The parties, not surprisingly, take opposite sides on this issue. Appellees state that "[f]reezing the fluid caused the sample to be unusable for testing; it did not infect Ms. Yonce or

terminate the pregnancy." Appellees ignore, however, the nexus between the frozen specimens and the twins' death. Appellees rely on Peterson, supra, for their argument that there is no legally sufficient evidence of causation in fact. The reliance is misplaced. In Peterson, there was evidence that the manner of construction of a wall was in violation of an ordinance. Peterson, 258 Md. at 14. The wall fell and caused damage; there was no evidence as to what caused the wall to fall and thus no evidence that the violation of the ordinance in fact caused the fall.

In this case, it is undisputed that the second amniocentesis would not have occurred but for the negligent act; a jury could find Ms. Yonce contracted the infection as a result of the second procedure; that the infection required Dr. Elberfeld to induce labor; and that inducement of labor led to the premature birth and subsequent death of the infants. Furthermore, the negligent act was a substantial factor in producing harm. The freezing of the specimens created a situation harmless until acted upon by other forces (i.e., the decision to undergo a second procedure and chorioamnionitis) for which the negligent actor was not responsible. See RESTATEMENT § 433(b).

Consequently, because a jury could find causation in fact, we must discuss whether the negligent act was a legally cognizable cause. That analysis, in turn, requires a discussion of foreseeability with reference to nature and extent of harm and

with reference to intervening forces and superseding causes.

2. Legally Cognizable Cause

Appellees argue that "a new chain of causation was initiated by the independent factors of Ms. Yonce's decision to be retested and the development of the extremely rare infection" and that neither was foreseeable. The argument is intriguing, but, ultimately, is without merit.

Often proximate cause is not proven because the negligent act was too far removed from the harm, the nature or extent of the harm was unforeseen, or the injured party was not a member of the class to whom injury was foreseeable. First, the temporal and spatial chain between the freezing of the specimens and the twins' untimely deaths was not so attenuated as to relieve appellees of liability. See Peterson, 258 Md. at 18-20. On September 26, 1990, Dr. Sanders performed the first amniocentesis upon Ms. Yonce. She discussed the situation with Drs. Elberfeld and Sanders; Dr. Sanders performed the second procedure on October 2, 1990; within two days of that procedure Ms. Yonce reported to the hospital and, subsequently, gave birth to the infants. Second, the nature and extent of harm was foreseeable, i.e., the "general field of danger" that the freezing of the specimens created was foreseeable and, therefore, by definition not highly extraordinary. As quoted in footnote 11, supra, SmithKline's technical information sheet pertaining to chromosome analysis of amniotic fluid declared, in capital letters, that

amniotic fluid specimens should not be placed on cold packs, frozen, or refrigerated. Third, the identity of the injured party was foreseeable. SmithKline should have been aware that destruction of the specimens might have resulted in a decision by the provider of the specimens, Ms. Yonce, to submit for a retest and to face the risks and complications associated with it.

In Hartford, a case heavily relied upon by appellees, Judge Bell, writing for the Court of Appeals, examined the importance of foreseeability in determining the existence of proximate cause, both in terms of foreseeability of harm and foreseeability of intervening causes. In that case, an escapee from the Springfield Hospital Center, Robert Lee Griffin, stole an unattended Manor Inn laundry van that an employee had left unlocked with the keys in the ignition. Hartford, 335 Md. at 139. During the span of thirty minutes, Griffin was involved in a hit-and-run collision, and a collision with a car which gave rise to the damage claim. Id. at 140. Having determined that Manor Inn's employee was negligent, Judge Bell next analyzed whether Griffin's negligence broke the chain of causation flowing from Manor Inn's negligence. Id. at 157. Judge Bell concluded that the causal connection was broken because "the manner in which he [Griffin] drove the van, and its consequences [injury to the insured], were 'highly extraordinary.'" Id. at 160. Comment

(e) to Restatement § 435[16] states:

> It is impossible to state any definite rules by which it can be determined that a particular result of the actor's negligent conduct is or is not so highly extraordinary as to prevent the conduct from being a legal cause of that result. This is a matter for the judgment of the court formulated after the event, and therefore, with the knowledge of the effect that was produced.

RESTATEMENT at 453-54.

Appellees latch upon the term "highly extraordinary" and suggest that the "contraction of an exceedingly rare infection was 'highly extraordinary' in the same sense that the Court considered the thief's manner of driving to be 'highly extraordinary.'" The argument has its foundation in Dr. Spangler's statement that the incidence of chorioamnionitis in all pregnancies is "extremely rare" and "far less than one percent."

We need not resort to statistical data to perform our proximate cause analysis, because the question is one of foreseeability. Specifically, the question is whether appellees should have foreseen the general harm, namely, the twins' deaths from complications arising from a second amniocentesis, and not the specific manifestation of that harm (i.e., premature birth at a non-viable age induced by chorioamnionitis). See Stone, 330 Md. at 337. In this instance, we cannot say as a matter of law

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[16]Judge Bell quoted § 435 at page 159 n.6.

that the potential complications of an amniocentesis procedure were highly extraordinary events and, therefore, unforeseeable.

Before leaving our discussion of foreseeability in this context and moving to intervening forces and superseding causes, we acknowledge appellees' argument that foreseeability is used to expand liability in the determination of a duty to warn and is used to limit liability in the determination of proximate cause. Consequently, they argue proximate cause is not established simply because a risk is foreseeable in a duty to warn context.[17] Applying that argument to this case, and recognizing that the concepts of duty to warn and informed consent are analogous, appellees conclude that, although a small risk of infection from an amniocentesis may be material and may be required to be disclosed for informed consent purposes, that fact does not make the infection foreseeable for proximate cause purposes. Appellees further conclude that duty to warn cases, e.g., Moran v. Fabergé, Inc., 273 Md. 538 (1975), are irrelevant with respect to a determination of foreseeability for proximate cause purposes.

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[17]A duty to warn with respect to particular hazards is based on a desire to prevent injury. The doctrine of informed consent, discussed in Sard v. Hardy, 281 Md. 432 (1977), requires disclosure of material risks and reasonable alternatives to a patient and is based on a desire that a patient be able to make decisions as autonomously and knowledgeably as possible. Conceptually, foreseeability is an element in the determination of a duty to warn; it is not a legal element of informed consent but is factually relevant in identifying material risks.

We note that, in determining whether a duty exists or in determining proximate cause, the relevant inquiry is the same, i.e., whether the general type of harm sustained was foreseeable. See Eagle-Picher, 326 Md. at 194-97; Henley v. Prince George's County, 305 Md. 320, 333-337 (1986); Stone, supra. In Stone, a case which did not involve a duty to warn, the plaintiff was unable to get a home equity loan because the defendant had failed to record timely the release of an extinguished lien. Stone, 330 Md. at 332-33. As a result, the plaintiff alleged he had to sell stock at a substantial loss in order to meet a margin call. Id. at 333. The defendants had no knowledge that the plaintiff was in the stock market or that he was in a financial crisis. Id. at 333. Moreover, the negligent act occurred a year prior to the harm. Id. at 332-33. The Court held that the plaintiff's losses were unforeseeable and cited Moran, a duty to warn case, as authority for the general field of danger test. Id. at 337.

Indeed, it is arguable conceptually that the concept of foreseeability is less expansive as an element of duty than as an element of proximate cause. Foreseeability, in the context of determining the existence of a duty, involves prospective consideration of facts existing at the time of the conduct. Foreseeability, as an element of proximate cause, permits a retrospective consideration of the facts. For present purposes, it is a sufficient answer to appellees' argument to observe that foreseeability is an element in the determination of a duty and

in the determination of proximate cause and is defined the same in each.

3. Intervening Force and Superseding Cause

Next, appellees contend that "Mrs. Yonce's informed choice to undergo the second amniocentesis and the unfortunate occurrence of a statistically rare and virulent infection intervened to cause the miscarriage." We part ways with appellees when they declare that those two intervening forces became superseding causes.

According to RESTATEMENT § 442, six factors should be evaluated when determining whether an intervening force rises to the level of a superseding cause:

> (a) the fact that its intervention brings about harm different in kind from that which would otherwise have resulted from the actor's negligence;
>
> (b) the fact that its operation or the consequences thereof appear after the event to be extraordinary rather than normal in view of the circumstances existing at the time of its operation;
>
> (c) the fact that the intervening force is operating independently of any situation created by the actor's negligence, or, on the other hand, is or is not a normal result of such a situation.
>
> (d) the fact that the operation of the intervening force is due to a third person's act or to his failure to act;
>
> (e) the fact that the intervening force is due to an act of a third person which is wrongful toward the other and as such subjects the third person to liability to

> him;
>
> (f) the degree of culpability of a wrongful act of a third person which sets the intervening force in motion.

Nothing in subsections (a) through (f) persuades us that Ms. Yonce's decision or the chorioamnionitis were superseding causes. Resort to §§ 442A and 443 buttresses our conclusion.

> § 442 A. Intervening Force Risked by Actor's Conduct
>
> Where the negligent conduct of the actor creates or increases the foreseeable risk of harm through the intervention of another force, and is a substantial factor in causing the harm, such intervention is not a superseding cause.
>
> § 443. Normal Intervening Force
>
> The intervention of a force which is a normal consequence of a situation created by the actor's negligent conduct is not a superseding cause of harm which such conduct has been a substantial factor in bringing about.

Appellees argue that the risk of miscarriage as a result of undergoing the second procedure was not affected by the negligent act, i.e., the risk encountered was the same risk encountered by Ms. Yonce during the first procedure and encountered by all patients who choose to undergo the procedure. That argument ignores that the risks associated with the first procedure were effectively at zero at the time Ms. Yonce encountered the risks a second time as a result of the negligent act. Ms. Yonce was unwillingly placed in a situation in which she had to choose

between a right to obtain relevant information that went beyond mere convenience, i.e., knowledge of the twins' genetic makeup, or remain ignorant; her decision was foreseeable. Atlantic Mut. Ins. Co. v. Kenney, 323 Md. 116 (1991). Although the risk of an infection was statistically small, it was part of the foreseeable harm that was associated with the amniocentesis. See RESTATEMENT § 442 A. Moreover, the non-negligent act of a plaintiff is not a superseding cause if it was foreseeable.[18]

Our examination of § 443 mandates the same conclusion. The non-negligent performance of an amniocentesis procedure does not, and cannot, eliminate naturally occurring risks. Those risks are normal consequences of the procedure. Comment b to § 443 defines the word "normal" for purposes of the Restatement.

> *b. 'Normal' consequences*. The word 'normal' is not used in this Section in the sense of what is usual, customary, foreseeable, or to be expected. It denotes rather the antithesis of abnormal, of extraordinary. It means that the court or jury, looking at the matter after the event, and therefore knowing the situation which existed when the new force intervened, does not regard its intervention as so extraordinary as to fall outside the normal class of events. When a negligently driven automobile hits a cow, it is scarcely to be regarded as usual, customary, or foreseeable in the ordinary

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[18]If a plaintiff committed a negligent act, and the negligence was a proximate cause of the harm, the burden of proof resting upon the defendant, Kenney, 323 Md. at 135, the defense of contributory negligence would be available and no recovery could be had unless the plaintiff were of tender years or could invoke the doctrine of last clear chance or some other exception. Harrison v. Montgomery County, 295 Md. 442, 450-51 (1983).

> sense in which that word is used in negligence cases, that the cow, after lying stunned in the highway for five minutes, will recover, take fright, and make a frantic effort to escape, and that in the course of that effort it will charge into a bystander, knock him down, and injure him. But in retrospect, after the event, this is not at all an abnormal consequence of the situation which the driver has created. It is to be classified as normal, and it will not operate as a superseding cause which relieves the driver of liability.

RESTATEMENT at 472-73. The negligent destruction of the specimens forced Ms. Yonce to make a decision. At the time the specimens were destroyed, it was foreseeable that Ms. Yonce would choose to undergo a second amniocentesis and be subject to the normal risks associated with that procedure, including the risk of infection.

We mentioned, supra at page 26, that a foreseeable act, even if it is the non-negligent act of the injured party, is not a superseding cause. Even if the intervening force is the negligence of a third party, it does not necessarily become a superseding cause. RESTATEMENT § 447, discussing negligent intervening acts, provides:

> The fact that an intervening act of a third person is negligent in itself or is done in a negligent manner does not make it a superseding cause of harm to another which the actor's negligent conduct is a substantial factor in bringing about, if
>
> (a) the actor at the time of his negligent conduct should have realized that a third person might so act, or
>
> (b) a reasonable man knowing the situation existing when the act of the third person was

> done would not regard it as highly extraordinary that the third person had so acted, or
>
> (c) the intervening act is a normal consequence of a situation created by the actor's conduct and the manner in which it is done is not extraordinarily negligent.

We mention § 447 because of appellant's reliance on Hartford. In Hartford, 335 Md. at 160-61, the Court of Appeals, after finding that the harm and manner of occurrence were highly extraordinary within the meaning of RESTATEMENT § 435, also held that negligent driving by the thief was a superseding cause because it was highly extraordinary. RESTATEMENT §447(c). RESTATEMENT § 447 and that part of the holding in Hartford are not directly applicable to this case because here the intervening act was that of the injured party. Furthermore, the intervening act was foreseeable and, for purposes of the motion for summary judgment, non-negligent.

Appellees view as persuasive Graham v. Keuchel, 847 P.2d 342 (Okla. 1993), wherein the Supreme Court of Oklahoma[19] thoroughly examined intervening forces and superseding causes in the context of an infant's death caused by erythroblastosis fetalis, a lethal form of anemia. Katrina Graham, the infant's mother, brought suit for her own bodily injury, and joined, with her husband James, a claim for their son Donald's wrongful death. Out of five pregnancies, Donald was the second child born to the

[19]Oklahoma has adopted a form of comparative negligence.

Grahams. Ms. Graham, who was RH-negative, contended that defendants, her physicians, did not determine her blood type nor give to her the antisensitization drug Rho-GAM in connection with her third pregnancy and subsequent miscarriage in 1981-82.

During the course of a pregnancy, the blood of the mother and fetus mix. If the mother is RH-negative and the fetus is RH-positive, the mother's body will react to the D antigen that is present in RH-positive blood and begin producing antibodies that may, during a later pregnancy, cross through the placenta and attack and destroy a RH-positive fetus's red blood cells. The mother becomes "sensitized" when her body begins producing the antibodies. Sensitization may be averted by administering Rho-GAM to an RH-negative mother during all pregnancies and after every miscarriage, abortion or birth of an RH-positive fetus or child. Failure to administer the drug increases the risk of the mother's immune system's response to a later RH-positive fetus.

Donald, who was RH-positive, was born on December 19, 1983 and died four days later. The Grahams alleged that Ms. Graham was negligently sensitized during her 1981-82 pregnancy and that the negligent act "was the direct cause of Donald's fatal condition and his death." Id. at 346. The doctors denied any negligence and argued, among other things, that

> a superseding cause cut off their liability to the parents because the mother had (1)

> *willfully* conceived Donald (2) with full knowledge that she had been sensitized and (3) with complete appreciation of the serious risk of harm to herself and to the child.

Id. at 347 (emphasis in the original). The case went to the jury, which returned verdicts in the defendants' favor; the Grahams appealed and the defendants noted a counter-appeal.

At trial, the defendants contended that the evidence adduced warranted a "supervening cause"[20] instruction. Over the Grahams' objection, the trial court submitted to the jury a supervening cause instruction. On appeal, the Grahams argued that the evidence did not support the instruction, that the instruction was flawed, and that Ms. Graham's decision to become pregnant could not be a supervening cause.

The trial court instructed the jury as follows.

> With respect to the plaintiff's [sic] claim for the wrongful death of their child only, you are instructed that if, following this (sic) alleged negligent acts or omissions of the named defendants, the mother, Katrina Graham, with full knowledge that she had been sensitized and with full appreciation of the risks and danger of subsequent pregnancies, *elected to become pregnant* with Donald Graham, then the named defendants negligent act (sic) or omissions were not a direct cause of the death of the child. [Emphasis supplied.]

Id. at 348 n.26. The Court recited a tripartite test for

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[20]The Court apparently amalgamated the terms intervening force and superseding cause. We understand the Court's use of the term "supervening cause" as equivalent to the term "superseding cause," as used in Maryland and the RESTATEMENT.

determining whether an act qualifies as a supervening cause.

> To rise to the magnitude of a *supervening* cause, which will *insulate* the original actor from liability, the new cause must be *(1) independent of the original act, (2) adequate of itself to bring about the result and (3) one whose occurrence was not reasonably foreseeable to the original actor.*

Id. at 348 (emphasis in the original). The Court then applied that standard to the facts before it.

> Our *three-prong test for supervening cause governs* the wrongful death claim. There must be proof tending to show that the child's injury and death resulted from the mother's *sexual conduct intended to bring about conception* that was (1) *not reasonably foreseeable* to the doctors, (2) *independent* of the doctor's [sic] substandard conduct and (3) *adequate of itself* to bring about the result.

Id. at 350 (emphasis in the original). The Court determined that four questions of fact had been presented: (1) whether Ms. Graham engaged in sexual conduct intended to bring about conception; (2) from a foreseeability perspective, what Ms. Graham had been told about her condition, what she knew and understood about her condition, who told her and when she was told; (3) whether Ms. Graham's acts and choices were independent forces; and (4) whether Ms. Graham's conduct was adequate to bring about Donald's death. Id. at 350-52.

The Court also discussed the effect of Ms. Graham's pregnancy as it related to the doctors' negligence.

> If, after her sensitization, the mother

> intentionally became pregnant with full knowledge of the consequences, her risk taking conduct would not be prudent; rather, she would be viewed as *exposing herself imprudently to a known and appreciated risk, which she need not have taken*. Once she *had become sensitized*, her underlying physical condition was *irreversible* and *unalterable*. The only action the doctors could have taken to ward off the harm that later occurred was to warn the mother of the consequences of her sensitization; they had no control over whether she would become pregnant again. In short, if she (1) knew that her reproductive capacity was impaired, (2) had been given adequate warnings about the dangers of conceiving in her sensitized condition and (3) completely understood the medical risk to herself and to her child if she conceived in a sensitized condition, the *forces set in motion by the doctors*['] *failure to give her Rho-GAM may be said to have become passive--i.e., they would not be harmful to the mother unless she intervened to bring about the harmful result.* If she undertook unreasonable risks by becoming pregnant in her sensitized condition, the harm for which she is suing in not attributable to the doctors, but to the *normal risks of pregnancy for a woman who has been sensitized*.

Id. at 352-53 (emphasis in the original) (footnote omitted). The Court held that the evidence supported a supervening cause instruction because

> [f]actual disputes govern[ed] *all the critical components* for deciding whether the mother's conduct in bringing about conception [wa]s a *supervening cause* that resulted in Donald's injury and death.

Id. at 353 (emphasis in the original).

Shifting its attention to the alleged defects in the supervening cause instruction, the Court concluded that the

instruction withheld the matter of foreseeability from the jury, and served to confuse the jury by the use of the phrase "elected to become pregnant."

> The jury might believe that if a woman in the mother's position became pregnant, she would be the sole cause of the harm. In short, the instruction gives the jury the false impression that *the mere act of conceiving and nothing more would be enough to constitute a supervening cause.* Rather, it is the sexual conduct *intended to bring about conception in the face of known danger to oneself and to one's child--or the reckless disregard of that danger--that would form the supervening cause.*

Id. (emphasis in the original).

The result that we reach is consistent with the result reached by the court in Graham. In the case sub judice, there is a dispute or, at least, not full agreement as to whether Ms. Yonce had full knowledge and appreciation of the risks of the amniocentesis procedures and whether she voluntarily encountered them.[21] The parties agree that Ms. Yonce's decision to undergo the second procedure was a reasonable act, i.e., she chose to encounter a reasonable, as opposed to an unreasonable, risk. For

[21]The issues before us do not require us to analyze Ms. Yonce's knowledge and appreciation of the risks as they pertain to the doctrines of assumption of the risk, informed consent, or contributory negligence. In a proximate cause analysis, the primary question is one of foreseeability; the extent of knowledge, the reasonableness of an act, and the degree of risk are relevant. In analyzing contributory negligence, the focus is on reasonableness; in informed consent, the focus is on materiality; and in assumption of risk the focus is on knowledge and appreciation of the risk and voluntariness.

purposes of causation, we cannot rule as a matter of law that her decision interrupted and terminated the chain of causation; the foreseeability of Ms. Yonce's decisions and actions properly fall within the finder of fact's province.

In addition to the legal basis for our conclusion, we observe that the result reached herein fully comports with public policy. Society's interests are furthered by the exercise of a right to obtain relevant information concerning a fetus for purposes of making informed decisions as opposed to mere convenience. Thus, the circuit court erred when it entered summary judgment against plaintiffs because a finder of fact could have found that Ms. Yonce's decisions and actions were foreseeable and, accordingly, did not amount to a superseding cause.

II. Assumption of Risk

Appellants have briefed the issue of assumption of the risk but, preliminarily, assert that we should not reach it because it was not decided by the circuit court. Appellees, arguing that it is properly before this Court, rely on the following statements in the circuit court's opinion, and assert that a "find[ing]" of "informed consent" was tantamount to a finding of assumption of risk. The circuit court recited what it perceived to be the "relevant facts" and, as part of that recitation, referring to the first amniocentesis, stated "[t]his court finds that both explicitly and implicitly, Ms. Yonce was aware that the

amniocentesis procedure posed some degree of health risks, and that she gave informed consent to [sic] it to be performed." At a later point in the opinion, the circuit court stated "Ms. Yonce's decision to consent to the second amniocentesis was made with full knowledge of the risks involved; her decision -- not the negligent act -- caused the performance of the second amniocentesis."

The doctrine of informed consent, adopted in Sard, supra, is based on principles of negligence and imposes upon a physician a duty to disclose material risks and available alternatives so that a patient can make an informed decision. The lack of informed consent provides a cause of action, whereas assumption of the risk provides a defense. Informed consent may exist in a given case even though the assumption of risk defense may not be available. This is because the doctrine of informed consent recognizes a right to withhold information under certain circumstances and it constitutes consent to a procedure before it occurs. Sard, 281 Md. at 444-45. Once a patient has given his or her informed consent, that consent to treatment does not serve to release a physician from the effects of a negligent act that might occur in the future. Assumption of the risk is a voluntary exposure to a known risk, Martin v. ADM Partnership, 106 Md. App. 653, 657 (1995), including the risk resulting from a negligent act. The circuit court clearly addressed only the issue of proximate cause and considered Ms. Yonce's knowledge only insofar

as it was relevant to that issue. It did not rule on "informed consent" and "assumption of risk." The question that the circuit court posed to itself was solely one of causation, see supra page 12. The circuit court answered the question as follows:

> There exists no proximate causation in the presented chain of events. As such, Plaintiffs' [sic] have not shown that negligence was in any way a proximate cause of injury and, therefore, cannot recover under the alleged causes of action.
>
> It is hereby ORDERED this 24th day of January, 1995, that defendant's Motion for Summary Judgement is granted.

In Sanders's motion for summary judgment, he successfully argued that his motion should be granted because the circuit court had previously held, in ruling on SmithKline's motion for summary judgment, that Sanders had not negligently performed the second amniocentesis and that the negligent freezing of the specimens was not the proximate cause of the injuries at issue.

Ordinarily, on appeal from an entry of summary judgment, we will not rule on a ground not ruled upon by the trial court. Maryland Cas. Co. v. Lorkovic, 100 Md. App. 333, 357 (1994); Md. Rule 8-131(a) (1996); Geisz v. Greater Baltimore Med. Center, 313 Md. 301, 314 n.5 (1988) ("[T]he appellate court will not ordinarily undertake to sustain the judgments by ruling on another ground, not ruled on by the trial court, if the alternative ground is one as to which the trial court had a discretion to deny summary judgment.") We decline, therefore, to

rule on assumption of risk because it was not ruled upon below and because it was not raised by Sanders.

For the reasons stated herein, we reverse the judgments entered below.

JUDGMENTS VACATED; CASE REMANDED FOR FURTHER PROCEEDINGS CONSISTENT WITH THIS OPINION; COSTS TO BE PAID BY APPELLEES.